

SPOUSES' EXPERIENCES OF HAVING A MATE  
IN THE INTENSIVE CARE UNIT FOLLOWING  
CORONARY ARTERY BYPASS GRAFT SURGERY

BY

JOANN LEE COZAC

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Department of Nursing

The University of British Columbia  
1956 Main Mall  
Vancouver, Canada  
V6T 1Y3

Date July 24, 1985

## **ABSTRACT**

### **The Spouses' Experiences of Having a Mate in the Intensive Care Unit Following Coronary Artery Bypass Graft Surgery**

It is generally recognized that a serious illness with concurrent hospitalization in an ICU will have an impact on family members. Few researchers, however, have described the ways in which spouses are affected when their mates are hospitalized in an ICU. Therefore, this study aimed to describe and explain the spouses' experiences of having a mate in an ICU following coronary artery bypass graft surgery.

Kleinman's conceptual framework guided the development of the research question and provided the focus for data collection and analysis. Kleinman proposes that an understanding of the client's perspective is necessary for the provision of effective health care.

A qualitative research method based on the theoretical perspective of phenomenology was used to answer the research question. The spouses' viewpoints were elicited through unstructured interviews. The sample consisted of seven spouses, four women and three men. The spouses were interviewed on two occasions, once while their mate was still in the ICU and once shortly following their mate's discharge from the ICU. A total of 13 in-depth interviews were conducted over a 3 month period.

Data were analyzed simultaneously with and following data collection. Responses that were similar were grouped together into

categories. After the data were examined and sorted into categories, the researcher defined the theme that dominated each category. The themes that emerged from the data were clarified, validated, and/or rejected by the participants during subsequent interviews. As relationships between the categories were identified, the important aspects of the spouses' experiences became apparent.

The findings revealed that the spouses located the ICU experience within the context of their experience with their mate's coronary artery bypass graft surgery. The spouses understood and made sense of the ICU experience by attaching meaning to specific events that related to the entire surgical experience. They perceived the surgical experience as consisting of three distinct but interrelated phases: pre-surgery; waiting during surgery; and post-surgery. During each phase, the spouses described and explained how they reacted to and coped with each new situation. These two themes, "reaction to the situation" and "coping with the situation," appeared as threads throughout the entire surgical experience. By organizing the data in relation to phases and themes, the researcher was able to meaningfully understand and communicate the spouses' entire surgical experience.

In view of the study findings, implications for nursing practice, education and research are delineated.

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## CHAPTER ONE

### Introduction

#### Background to the Problem

Coronary artery disease ranks as the leading cause of death in Canada (Canada, 1982a). While the disease can result in sudden death for some, others may experience years of symptoms such as chest pain and decreased exercise tolerance. Most Canadians undergo years of medical treatment by diet, exercise and medication to control these symptoms and remain functional in employment and/or familial roles.

In addition to medical treatment, surgical procedures for treating coronary artery disease have been developed in recent years. These surgical procedures, which entail creating new pathways for blood to the ischemic myocardium, have alleviated or improved symptoms of coronary artery disease and dramatically extended the lives of thousands of people who would otherwise have died (Loop, 1983a).

Increased availability of these procedures and decreased mortality rates due to advancements of modern medical technology, scientific knowledge and surgical expertise (Loop, 1983b; Ochsner & Mills, 1978; Rahimtoola et al., 1981), have made coronary artery bypass graft surgery a common, sophisticated and effective palliative procedure for persons suffering from coronary artery disease (Andreoli, Fowkes, Zipes & Wallace, 1979; Brockman, 1975). However, despite the extremely high success rate, coronary artery

bypass graft surgery is still considered to be a life-threatening event that may result in disability of unknown duration.

In 1962, Sabiston performed the first aortocoronary bypass operation (Oschsner & Mills, 1978). In 1974 in Canada, 2,462 patients underwent coronary artery bypass graft surgery (Canada, 1977). By 1978, this number had increased to 4,603 (Canada, 1982b). Thus, coronary artery bypass graft surgery has come to represent a large proportion of the total surgical procedures performed in many hospitals.

Persons undergoing coronary artery bypass graft surgery are transferred to an intensive care unit (ICU) following the operation. Their spouses subsequently join them there. Roberts (1976) states that a critically ill patient enters the ICU in a biological crisis, while the family enters the same ICU in a psychological crisis.

Illness or surgery may be a totally new experience for spouses, their first experience of an ICU with its bewildering atmosphere and unfamiliar devices. In the ICU, the nurse's attention focuses primarily on the patient, whose condition demands constant monitoring and care. While providing this care, the nurse comes in contact with the spouse, and has an opportunity to influence the spouse's experience positively. However, in reviewing the literature, the researcher was unable to find any systematic investigation that described the spouse's experience, from a

personal point of view, of having a mate in the ICU following coronary artery bypass graft surgery. A discrepancy in the spouse's and nurse's perceptions of this experience may result in a barrier to appropriate and timely nursing interventions. Nurses must find out what these discrepancies are so they will be able to negotiate care that is acceptable to both client and nurse. Thus, the researcher felt an understanding of a spouse's subjective experience of having a mate in the ICU following coronary artery bypass graft surgery would assist nurses in the provision of effective nursing care to both patient and spouse.

A review of the literature did reveal that families who experience having a critically ill family member in an ICU do have special needs (Breu & Dracup, 1978; Cammarano, 1980; Daley, 1980; Dracup & Breu, 1978; Gillis, 1981; Molter, 1976, 1979; Prowse, 1983; Rasie, 1980; Wilson, 1975). The review further revealed that spouses visiting their mates in the hospital in general, and the ICU in particular, are confronted with many occurrences which they may experience as stressful (Breu & Dracup, 1978; Doerr & Jones, 1979; Fowler Byers, 1983; Gardner & Stewart, 1978; Potter, 1979; Roberts, 1976). Thus, the patient's spouse also requires attention because the mate's critical condition combined with the unfamiliar sights, sounds and smells of the ICU may cause fears and anxieties that adversely affect the spouse's health status and coping abilities. Given the nature of the lifestyle changes required following

coronary artery bypass graft surgery, the spouse plays an important supportive role during both the intensive care phase of hospitalization and the recovery phase of the illness. However, Fowler Byers (1983) and Roberts (1976) suggest that family members experiencing fears and anxieties are unable to provide support, either to each other or to the patient. The nurse and other health professionals may be able to decrease these fears and anxieties if they fully understand the spouse's experience in the ICU.

The impact of illness has been reported to have a striking effect on family members (Litman, 1974; Rudy 1980); and the response of the family members, who play an important role in the patient's life, will influence the patient's immediate and long term recovery (Croog, Levine, & Lurie, 1968; Egger, 1980; Gillis, 1981; Hicks Kuenzi & Fenton, 1975; Litman, 1974; Olsen, 1970; Richardson, 1945; Roberts, 1976; Rudy, 1980; Sikorski, 1982; Speedling, 1980). Thus, family members can either promote or impair the recovery process.

Rasie (1980) suggests that a calm family member can help a patient deal with fears about his or her own environment and illness. Croog et al. (1968) recognize the importance of family members by stating, "even neurotic individuals can adjust to severe cardiac impairment if they are constantly integrated in a strong, supportive, reasonable but not overprotective, healthy family structure, which accepts and understands the illness" (p. 135).

Thus, the responses of the spouse to the ICU may affect his/her mate's recovery and return to normal functioning.

Although nurses and other health care professionals attempt to understand the spouse's experience during the intensive care phase of a mate's hospitalization, their perceptions arise from a professional viewpoint, whereas the perception of spouses, most of whom are not health care professionals, may differ. Munhall (1982) claims that individuals experience their own "reality," and are autonomous. She reports that individuals interpret their own experiences and give meaning to them, and that although these experiences can be shared, they can differ from another's "reality."

In a study by Irwin and Meier (1973), perceptions of supportive measures used in helping relatives of oncology patients were compared between relatives and health professionals. Although a small sample was used, a comparison of the relatives' responses to those of health care professionals showed a significant difference in how supportive behaviors were perceived. In another study Carey (1973) found significant differences between the perceptions of patients and health professionals with respect to the importance of having a chaplain available to patients at all times.

The above studies indicate that differences usually exist between perceptions of health professionals and family members of patients. Thus, the present study was designed to systematically explore the experience of the intensive care phase of

hospitalization as perceived by spouses of coronary artery bypass patients. The information gained will contribute to the understanding of spouses' experiences with their mates' coronary artery bypass graft surgery and, more specifically, the intensive care phase of hospitalization as an aspect of the experience. It is hoped that the information gained will be utilized by nurses and other health care professionals to assist spouses to prepare for and cope with the intensive care hospitalization period of their mate, and to aid spouses in preparing for the recovery process of their mate following surgery in order that a more favorable outcome for both patient and spouse can be achieved. The information gained will also contribute to the development of nursing theory about the spouse's perspective, which serves as a guide to nursing practice.

### **Conceptual Framework**

Since nurses are responsible for assisting patients' relatives in coping with new and often difficult situations (Bedsworth & Molen, 1982), nurses should have an understanding of the experiences of the relatives. Relatives, particularly spouses, have been reported to be profoundly affected by their mate's illness (Klein, Dean, & Bogdonoff, 1967; Larter, 1976; Skelton & Dominian, 1973) because of the interdependent relationship that exists between a husband and a wife that is "unparalleled by any other in our society" (Silva, 1977, p. 39).

Although nurses frequently come in contact with spouses in the ICU, the contact is brief. It is often difficult during this brief

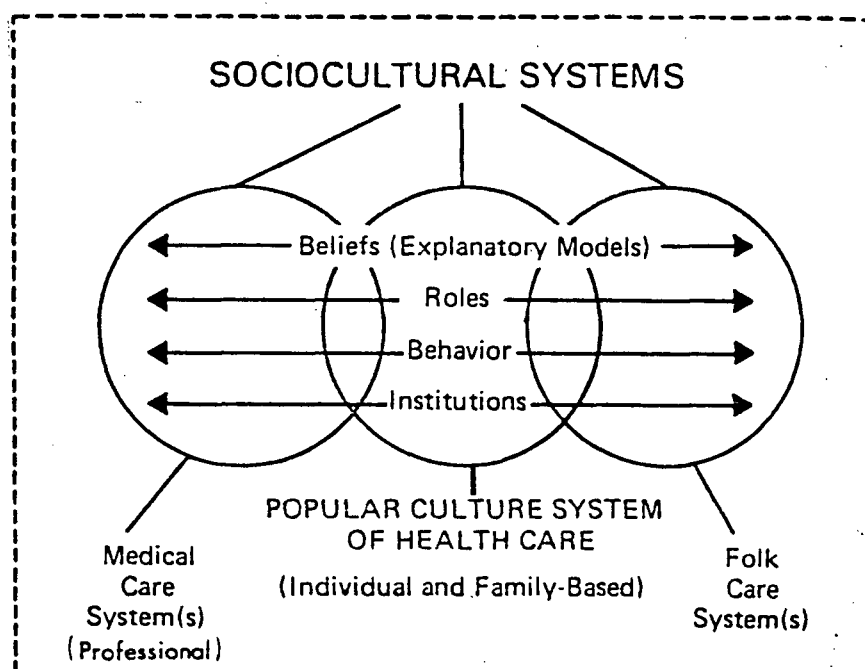


encounter to assess the spouses' needs. As a result, nursing interventions aimed at assisting spouses to cope may be based on the needs of the spouse as perceived by the nurse. However, to best help spouses cope during the intensive care hospitalization period of their mate, nurses must have some knowledge about the spouse's perspective so that energy of nurses and other health professionals is usefully directed and total patient care is accomplished (Molter, 1979).

Kleinman (1978) introduced a conceptual framework which acknowledges the importance of discovering the client's perspective, and addresses the problems that arise when discrepancies occur between the professional's and client's perception and interpretation of a particular sickness episode. Kleinman's conceptual framework guided the development of the research question in this study, and provided the focus for data collection and analysis.

Kleinman (1978) conceptualizes the health care system as a sociocultural system consisting of three distinct but interacting systems within which sickness is experienced and reacted to. These are the professional, which consists of scientific medicine and "professionalized indigenous healing traditions" (Kleinman, 1978, p. 87); the popular, which consists of the individual, the family, the social network, and the community activities; and the folk, which consists of non-professional healing specialists. See Figure

1 for a graphic representation of Kleinman's conceptualization of the interrelated systems of the health care system.



**Figure 1: Health Care System**

(Kleinman, 1978, p. 422)

Each system contains and constructs its own "clinical realities" which includes an organization of its beliefs, expectations, roles, relationships and transaction settings (Kleinman, 1978). How individuals construct "clinical realities" and respond to sickness is "culturally shaped in the sense that how we perceive, experience, and cope with disease is based on our explanations of sickness, explanations specific to the social positions we occupy and systems of meaning we employ" (Kleinman, Eisenberg, & Good, 1978, p. 252). These explanations, according to Kleinman, influence our expectations and perceptions of sickness.

Kleinman et al. (1978) describe sickness as a complex phenomenon consisting of biological, psychological, and sociocultural aspects. The concepts of "disease" and "illness" are conceptualized as constituting sickness. This disease/illness distinction is made in an attempt to explain and understand sickness (Kleinman et al., 1978).

Disease, which is commonly associated with the professional system, is defined as "the malfunctioning or maladaptation of biologic and psychophysiologic processes in the individual" (Kleinman et al., 1978, p. 252). Thus, individuals in the professional system perceive, explain and respond to disease in terms of biological, psychological, and physiological theories. Illness, on the other hand, is principally associated with the popular system. "Illness represents personal, interpersonal, and cultural reactions to disease or discomfort" (Kleinman et al., 1978, p. 252). Thus, illness denotes the "experience" of disease. It is the way individuals in the popular system perceive, explain, and respond to disease (Kleinman, 1978).

Kleinman (1978) states that all attempts to understand sickness and its treatment can be thought of as explanatory models. Explanatory models are ways of experiencing and perceiving an episode of sickness and its treatment, and therefore influence the behavior that perception evokes. Kleinman (1978) states that explanatory models can be elicited as coherent accounts of reality

even though they may change, contain contradictions, and have varying degrees of logical development. Kleinman (1978) also reports that individuals in each system have their own explanatory models for a particular sickness which may "complement, compete with, or distort one another" (Kleinman, 1978, p. 421).

Interactions between various divisions of the health care system involve transactions or exchanges between the differing explanatory models. Kleinman (1978) suggests that an understanding of the client's explanatory model may decrease the conflicts, difficulties and misunderstandings that arise due to discrepancies between the explanatory models held by clients and health care professionals.

Kleinman's conceptual framework (1978) directed the researcher to examine the experiences associated with the ICU from the spouse's perspective, since the spouse's experiences will likely be different than those of the professionals. Spouses of patients who are in the ICU following coronary artery bypass graft surgery are members of the popular system. They have explanatory models based on their experience with illness that can be understood by eliciting their perceptions. Nurses must understand the spouse's explanatory model in order to improve clinical communication and provide effective nursing care.

### **Problem Statement**

With the development of intensive care units around 1965 (West, 1975), the goal of providing the critically ill patient with

individualized and closely monitored care was achieved (Potter, 1979). However, these special care units have a stress-creating potential for all who come in contact with them, including the critically ill patient's family members (Egger, 1980; Potter, 1979; West, 1975). Several authors from the fields of nursing, social work, psychiatry, and medicine have identified the importance of meeting the needs of these people (Breu & Dracup, 1978; Chandler, 1982; Cooper, 1976; Fowler Byers, 1983; Gardner & Stewart, 1978; Hoover, 1979; McPhee, 1983; Rasie, 1980; Stockdale Warmbrod, 1983; Wallace, 1971). Fowler Byers (1983) suggests that when the needs of family members are not being met, the family members may be unable to cope or to provide support to the patient. The ICU environment with its unfamiliar sights, sounds, and smells may cause fears and anxieties that adversely affect the health status and coping abilities of the spouse. Since the spouse's knowledge, attitude and ability to cope during the initial postoperative period may be crucial to the patient's successful recovery, understanding the spouse's experience is a vital aspect of care of the coronary artery bypass patient. Eliciting the spouse's perspective on the mate's intensive care hospitalization period will add an important dimension to current knowledge.

This study, therefore, addresses the following question: What is the spouse's experience of having a mate in the ICU following coronary artery bypass graft surgery?

### **Purpose of the Study**

To understand the intensive care hospitalization experience from the spouse's perspective, this study proposes to: describe the spouse's experience of having a mate in the ICU following coronary artery bypass graft surgery.

### **Objectives of the Study**

The specific objectives of this study were the following:

1. to describe the thoughts, feelings, and actions of spouses whose mates were in the ICU following coronary artery bypass graft surgery;
2. to describe the spouses' concerns about any aspects of the intensive care phase of their mates' hospitalization;
3. to identify ways in which nurses can assist spouses to prepare for and cope with their mates' intensive care hospitalization period.

### **Theoretical and Methodological Perspectives of the Study**

A qualitative research method based on the theoretical perspective of phenomenology was used to answer the research question of this study. Filstead (1970) reported that qualitative methodology allows the researcher to interpret the world from the participant's perspective rather than from the preconceived, rigidly structured, and highly quantified techniques devised by the researcher.

Qualitative research is a systematic study of the natural, everyday world of human life experience, and is considered useful

when studying unexplored phenomena (Leininger, 1985; Swanson & Chenitz, 1982). This approach was selected because, although the literature reviewed substantiates the notion that critical illness has an impact on the family members (Litman, 1974; Rudy, 1980), there was little research to indicate that the spouse's perspective was understood. Eliciting the spouses' perspective of how they experienced the intensive care hospitalization period will add an important dimension to current knowledge.

Phenomenology is a philosophy, an approach, and a type of research method with specific goals (Knaack, 1984; Oiler, 1982; Omery, 1983). The phenomenological approach is an inductive, descriptive research method (Omery, 1983; Stern, 1980) that focuses on understanding human behavior and human experience (Knaack, 1984). The goal of phenomenological research is to understand human experience from the perspective of those being studied, in order to see life as those individuals see it (Davis, 1978; Knaack, 1984; Oiler, 1982; Omery, 1983). This approach emphasizes the meaning social acts have for individuals who perform them and who live in a reality created by their subjective interpretations of these acts (Davis, 1978). Thus, emphasis is placed on the individual's inner or subjective understanding of events, behaviors and surroundings in order to learn how individuals interpret and give meaning to a particular situation (Rist, 1979).

A researcher utilizing the phenomenological method approaches subjects with an open mind and accepts the subjective descriptions

of the meaning of the experience for those being studied without trying to make it fit a preconceived definition of the phenomenon (Knaack, 1984; Omery, 1983).

Phenomenology is considered appropriate for this study since an attempt is being made to understand the experience of having a mate in the ICU following coronary artery bypass graft surgery, from the perspective of the spouse. This approach will allow the spouses being studied to share the meaning they give to their experience, in the manner in which they view it.

The phenomenological approach is congruent with Kleinman's (1978) conceptual framework, since both emphasize that individuals perceive and give meaning to the reality they experience in everyday life. They also emphasize the importance of understanding the perspective of the individual. Kleinman (1977) states that the phenomenological approach can involve "comparison of how sickness is socially constructed in the popular everyday world and in professional settings" (p. 12). Thus, Kleinman's conceptual framework (1978) and the phenomenological approach allow knowledge to be gained about a spouse's experience of having a mate in the ICU following coronary artery bypass graft surgery, from the spouse's viewpoint. Understanding how spouses in the popular arena of the health care system attach meaning to this experience will provide nurses with new knowledge to guide nursing practice.



### Definition of Terms

The following terms are defined to clarify their use in this study:

1. **Coronary artery bypass graft surgery** - heart surgery which creates new pathway(s) for oxygen-rich blood to bypass blockages or major narrowings in the coronary arteries (American Heart Association, 1976).
2. **Mate** - an individual who has experienced coronary artery bypass graft surgery.
3. **Spouse** - an individual who is the husband or wife of the mate, resides with the mate, and visits the mate in the Intensive Care Unit.
4. **Intensive Care Unit** - a highly specialized area within the hospital where mates are transferred for constant surveillance and treatment after having undergone coronary artery bypass graft surgery.
5. **Experience** - the response to having a mate in the ICU following coronary artery bypass graft surgery including: thoughts, feelings, and actions, and the meaning these have for the spouse; and the concerns about any aspect of the intensive care phase of hospitalization.
6. **Concerns** - the worries expressed and questions asked during an interview by the spouse relating to the experience of the ICU and the event of the mate's major surgery.

### **Assumptions**

Assumptions related to this study are:

1. It is assumed that the husband-wife dyad is a significant relationship and that an experience requiring hospitalization in an ICU for one person will have considerable impact on the other.
2. The spouse's knowledge, attitude and ability to cope during the mate's initial postoperative period following coronary artery bypass graft surgery is crucial to the mate's recovery.
3. Spouses whose mates have undergone coronary artery bypass graft surgery will have common experiences related to the intensive care phase of hospitalization.
4. Spouses whose mates have undergone coronary artery bypass graft surgery will be able to identify and be willing to articulate their experiences by offering honest descriptions.

### **Limitations of the Study**

The location of the study was limited to the Intensive Care Units of one large Vancouver hospital. Therefore, any specific characteristics of this setting may influence the spouse's experience of having a mate in the ICU following coronary artery bypass graft surgery.

### **Summary**

The purpose of this study is to explore, from the spouse's point of view, the experience of having a mate in the ICU following coronary artery bypass graft surgery. Spouses of coronary artery

bypass patients may have specific feelings, thoughts, and reactions during the intensive care phase of hospitalization. Since nurses have the opportunity to help the spouse, they must understand the spouse's experience in order to provide appropriate care. However, it was found that little research had been conducted into spouses' experiences, making a need to describe the spouse's experience during the mate's stay in the intensive care unit following coronary artery bypass graft surgery evident. This knowledge may assist nurses and other health care professionals in providing the necessary guidance and support in the early recovery period to spouses with subsequent beneficial effects on the patient.

### **Organization of the Thesis**

In this introductory chapter, the problem and background to the problem, conceptual framework, the study purpose, the study objectives, the study theoretical and methodological perspectives, definition of terms, assumptions, and limitations have been stated. Chapter Two outlines the research methodology, and discusses details related to selection of participants, ethical considerations, data collection and data analysis. In Chapter Three, data analysis will be described in greater detail. Chapter Four presents spouses' accounts of their experiences during the intensive care hospitalization period of their mates, the researcher's analysis, and literature relevant to the spouses' accounts. In the final chapter, the findings are summarized, implications for nursing

practice, education, and research are identified, and recommendations for further research arising from this study are made.

## **CHAPTER TWO**

### **Methodology**

#### **Introduction**

A qualitative research method based on the theoretical perspective of phenomenology was selected to answer the research question because the purpose of this study was to understand the intensive care hospitalization experience from the spouse's perspective. Various authors have reported that when the purpose of a research study is to increase understanding of human behavior from the participant's perspective, phenomenology is the method of choice (Bogdon & Taylor, 1975; Davis, 1978; Omery, 1983; Rist, 1979). Thus, the researcher considered the phenomenological research methodology to be the most suitable approach to answering the research question posed in this study.

This chapter begins with an explanation of the criteria and method of selecting participants. The ethical considerations pertaining to the mates' and spouses' rights will follow. Finally, the process of simultaneous data collection and analysis will be described.

#### **Selection of Participants**

A purposive sampling technique was used in this study. The process of purposive sampling required the researcher to select particular individuals who showed the presence of a desired characteristic (Polit & Hungler, 1983). The purpose of purposive

sampling is to ensure collecting data from individuals with experiences specific to the research study in question. Therefore, the participants in this study were selected because their current experience with the ICU made them especially knowledgeable in the areas dealt with by this study. These individuals were chosen because it was felt that their personal experience qualified them as reliable sources of information.

The researcher was interested in spouses of patients who were undergoing coronary artery bypass graft surgery because statistics (Canada, 1977, 1982b) indicate that the incidence of this particular operation is on the increase and that health professionals are therefore becoming exposed to these particular individuals more often. The researcher also decided to select spouses of patients undergoing scheduled or elective surgery rather than emergency surgery. The reason for this was to confine the study to spouses who had been aware that hospitalization would occur. It was felt that spouses confronted with their mates undergoing emergency surgery would probably undergo different experiences. All spouses who met the study criteria were included in the study, regardless of previous experience with the ICU as a patient or visitor.

### **Criteria for Selection**

The researcher decided that although the mates would not be included in the interviews, their written consent was necessary. This was because the husband-wife dyad is assumed to be a significant relationship, and, since the spouse's experience in the

ICU would involve discussion of the mate and perhaps the relationship, it was felt that the mate should be asked to consent and should be allowed to withdraw that consent at any time. For these reasons, selection criteria were defined for both mate and spouse.

Mates were selected according to the following criteria:

1. The mate must be admitted to an acute care hospital for the first time to undergo elective coronary artery bypass graft surgery during the time period for mate selection into the study.
2. The mate must be transferred to an Intensive Care Unit following coronary artery bypass graft surgery.
3. The mate must be able to understand, speak and read English, regardless of ethnic background.
4. The mate must be married and reside with his/her spouse.

Spouses selected to participate in the study were required to meet the following criteria:

1. The spouse must visit or intend to visit the mate while the mate is in the Intensive Care Unit.
2. The spouse must be old enough (nineteen in British Columbia) to legally sign a consent form.
3. The spouse must be able to understand, speak and read English, regardless of ethnic background.

### **Selection Procedure**

After receiving approval from the University of British Columbia Behavioural Sciences Screening Committee (see Appendix A),

a letter requesting permission to conduct the study was sent to the identified hospital (see Appendix B).

The study was conducted at a large metropolitan teaching hospital that routinely provides treatment to patients in the ICU immediately following coronary artery bypass graft surgery. The hospital was conducting a teaching program for coronary artery bypass graft patients and their spouses at the time of participant selection. This program included a video which describes the equipment and care patients receive in the ICU following the operation.

The hospital requested that the researcher obtain verbal permission to conduct the study from the directors of the department of anaesthesiology and the ICU. After permission was obtained, the researcher met with the head nurse of the cardiac teaching unit to further explain the study and to request her cooperation in the selection of mates who met the specific criteria. Mates undergoing coronary artery bypass graft surgery were admitted and discharged from this unit, with temporary stays in the ICU and Step Down Unit following the operation.

Letters outlining the purpose, nature and implications of the study were sent to the hospital's cardio-thoracic surgeons (see Appendix C). Names of potential participants were sought through telephone contact with the head nurse. The researcher then contacted the mate's cardiothoracic surgeon by telephone to respond



to any comments or questions he had with respect to the mate and the study.

Mates who met the sampling criteria were approached by the researcher after their admission. The researcher introduced herself to them and stated she was a graduate student in nursing, currently conducting a research study. The researcher explained that working in the ICU had alerted her to the need for family centered nursing and the importance of understanding spouses' experience in order to provide adequate nursing care to patients and families. The researcher further explained that she now had the opportunity to develop an understanding of the spouse's experience, and at the same time contribute to nursing's knowledge and professional advancement. The researcher indicated that nursing care directed to spouses might be improved if their ICU experience was better understood.

The researcher explained her position in relation to the staff. She also explained why the mate had been selected as a study subject and where she had obtained the name. Each mate was then asked to sign a consent granting permission for the researcher to approach his/her spouse (see Appendix D). At the hospital's request, a copy of this consent was placed on the mate's chart.

The spouse was then contacted and the researcher explained the purpose, nature and implications of the study. Potential participants were assured there were no risks involved. They were

also told their contribution as a study participant would benefit nursing in general, and future care of spouses in particular. The spouses were also informed that a report in the form of a thesis would be written from all the information received, and that these results of the study might be published in order to promote an understanding of the spouse's experience in having a mate in the ICU following coronary artery bypass graft surgery.

All spouses were approached by the researcher in the mate's room during visiting hours on the second day after the mate had been admitted to hospital. The letter of information and consent (see Appendix E) was given to each spouse and signed prior to the mate going for coronary artery bypass graft surgery.

Two days after their mates' surgery, spouses were contacted by phone to arrange for a convenient interview time. This allowed the spouse sufficient time to experience the ICU setting before being asked to reflect upon the experience. It also enabled the researcher to obtain data while the spouse's mate was still in the ICU.

### **Description of Participants**

The study sample, which was obtained over a three month period, was composed of seven spouses, four women and three men. Spouse age ranged from 39 to 64 with a mean age of 55. All spouses spoke English and were married. The years of married life between the spouses and their mates, who had coronary artery bypass graft

surgery, ranged from 12 to 43 with a mean of 31 years. Four of the seven participants were born in Canada. Of the three born outside Canada, one was born in England, one in Germany, and one in India. The spouse born in India immigrated to Canada 5 years ago and the others immigrated 30 years ago.

Four of the spouses lived in the Vancouver area and three individuals did not. The researcher had originally planned to only include in the study spouses who lived within the Vancouver area because they would be accessible for interviews and because it was felt their perceptions of their experience might differ from those who lived outside the Vancouver area. However, as the study progressed, spouses from outside the Vancouver area were included in the study because they were available and willing to participate. Two of these individuals subsequently demonstrated that their experiences were similar to those who lived in the Vancouver area. However, the third spouse had additional concerns as a direct result of living outside the Vancouver area.

The spouses represented a variety of professions. This was considered appropriate for this study because the researcher aimed to discuss the spouse's experience regardless of profession.

Four spouses had had past experience with the ICU occurring from one month to seven years previous to the study period.

As indicated earlier, a hospital video which describes equipment and the care patients receive in the ICU following

coronary artery bypass graft surgery is routinely shown to all patients and their families prior to the patient going for surgery. However, five of the spouses did not view the video. The reasons were varied. Two spouses believed the video would increase their mates' anxiety; one felt it would increase her own anxiety; and the other two spouses were not given an opportunity to view the video.

One spouse asked to terminate participation in the study prior to the second interview due to unexpected complications in the course of her mate's recovery which made the spouse unavailable for interviewing.

### **Ethical Considerations**

The research proposal was submitted to the University of British Columbia Behavioural Sciences Screening Committee for ethical review and approval prior to contacting the identified hospital. Copies of the research proposal were then submitted to the Research Committee of the hospital for ethical review and approval. Suggestions made by the committee were accepted and incorporated into the design of the research study. For example, the researcher originally planned that each mate who met the specific criteria would receive from the head nurse a letter of information about the study which had been prepared by the researcher. This letter of information was to be signed by the mate and returned to the head nurse if the mate was in agreement to

meeting with the researcher to discuss the study further. The researcher would then receive the names of the mates who were in agreement to meeting with the researcher. However, this method for contacting mates was altered at the request of the hospital Research Committee, who suggested the researcher contact the mates in person after receiving from the head nurse the names of the mates who met the specific criteria.

The purpose, nature, and implications of the study were explained to the mate and his/her spouse separately or together by the researcher, depending upon if both were present when the researcher arrived at the hospital. Time was taken with the mate and spouse to emphasize that participation, nonparticipation, or withdrawal from the study at any time would have no bearing on their current or future medical or nursing care. Confidentiality of all information received, the right to refuse to answer questions, and anonymity in reporting of information was explained, assured and recorded on the consent forms.

The mates and spouses were informed that access to the data would be limited to the researcher and the three members of her research committee. They were also informed that names would not be written on the data collection sheets and that transcriptions would be coded, to ensure that only the researcher had access to the participants' identities.

A verbal explanation and written consent informed the participants that they could request erasure of any tape or portion

of a tape at any time during the study. The participants were also assured that the information received would be used only for the purpose stated to them. The mates and spouses were informed verbally and in writing that the tapes would be erased after the thesis had been written. They were also informed that there were no financial benefits to participating in the study, nor were there any risks.

If the mate and his/her spouse agreed to participate, the researcher read the identified consent forms to each individual, asked if there were any questions, and then requested that they read and sign the consent form in the researcher's presence.

The Research Committee at the hospital was assured by the researcher that the results of the study would be available to them upon completion of the project.

### **Data Collection**

In qualitative research, data collection and analysis occur concurrently (Glaser & Strauss, 1967). However, they will be discussed separately in order to promote a clearer understanding of each.

In-depth interviewing was used to collect data about the spouse's experience of having a mate in the ICU following coronary artery bypass graft surgery. Interviews provide an opportunity for the researcher to not only gain in-depth information, but also to explore and clarify issues (Sweeney & Olivieri, 1981). Interviews

yield descriptive data which enable the researcher to see the world from the participant's viewpoint, and provide participants with the opportunity to express their views about their experience in their own words (Bogdon & Taylor, 1975).

Kleinman's (1978) conceptual framework provided direction for the type of questions asked. A semi-structured interview guide (see Appendix F) with open-ended questions was developed and used during the interviews to allow the participants a free response (Notter, 1978) rather than a response restricted to or guided by alternatives (Brink & Wood, 1983). The semi-structured interview is a flexible strategy for discovering information (Lofland, 1971), because it provides specific topics to be explored and allows the researcher freedom to pursue any response of special interest generated by the participants throughout the interview (Treece & Treece, 1982). Thus, the semi-structured interview guide provides an opportunity to elicit the participants' perceptions of their experience. It also allowed the researcher to explore those participant's responses that were not clearly understood. The interviews did not follow a set pattern. Clarifying questions were asked also, in order to promote clarification and/or elaboration of the spouse's response.

The interview guide was adapted from the review of the work of other researchers who have used a similar method (Breu & Dracup, 1978; Gauchie, 1982; Hampe, 1973; Potter, 1979; Rasie, 1980; Roberts, 1976). The questions posed to all spouses were designed

to examine the spouse's experience of having a mate in the ICU following coronary artery bypass graft surgery.

The content of the second interview was based upon analysis of the first interview, because the purpose of the second interview was to gather additional information and clarify information gained from the first interview.

Lofland (1971) suggests the researcher provide participants with an introduction prior to the interview in order to clarify what is expected of them. Thus, prior to each interview the researcher reiterated the purpose of the study and the confidentiality of the data. The researcher also explained that since she was seeking an understanding of the spouse's experience in the ICU, all responses were correct. This was done in order to obtain the trust and confidence of the participants.

The researcher established rapport with the participants so that they would feel more at ease and perhaps be more willing and able to respond. The researcher created a pleasant and friendly atmosphere by initiating informal conversation and allowing for free expression of thoughts and feelings. Since the researcher felt that familiar surroundings would provide the security necessary to promote the spouse's comfort during the interview, the researcher preferred to conduct the interviews in the participant's home. However, when asked where they would like to meet, most felt that distractions at home would interfere with the interview. Thus, ten



interviews were conducted in a large, private teaching room in the hospital and two interviews were conducted in the privacy of the participant's home. Conducting the interviews in a private place reassured the spouses of their anonymity and allowed the interviews to occur without interruption.

Since mates are only in the ICU for a limited time, the first spouse interview occurred when the spouse's mate was in the ICU. The second interview occurred from 3 to 14 days following the first interview, at a mutually convenient time. This time period was chosen so the experience would still be fresh in the spouse's mind.

Each participant was interviewed twice by the researcher, with the exception of one individual as indicated earlier. Each interview ranged from 30 to 90 minutes in length with an average time of 45 minutes. Thus, data were obtained through 13 in-depth interviews with 7 spouses having a mate hospitalized in the ICU following coronary artery bypass graft surgery over a 3 month period.

All interviews were taped to ensure accurate reporting, and the tapes were transcribed immediately following each interview.

None of the participants objected to having the interviews taped and none of them requested that the tape be turned off or erased. They reported that the presence of the tape recorder did not inhibit them in any way.

Many mates and spouses expressed pleasure that spouses were recognized as important and that health professionals were

interested in helping spouses to prepare for and cope with their ICU experience. The researcher had no difficulty in gaining the cooperation of the mates and their spouses. The spouses confirmed the researcher's assumption that spouses would be able to identify their experiences and be willing to articulate them. Everyone contacted expressed interest and a willingness to take part in the study. None of the spouses approached refused to participate but some spouses doubted their ability to be helpful to the researcher. Spradley (1979) suggests that most participants are initially unsure that they know enough and that the researcher is really interested in what they have to say. He emphasized the importance of the researcher expressing interest to the participants. Therefore, although some spouses felt they had little to offer, assurance from the researcher that there were no right or wrong ways to respond made individuals willing to participate. At the end of each interview, the researcher made the participants aware of the importance of their contribution to the research study.

Although many spouses were tearful during the interview, they were willing to talk. Most spouses expressed pleasure at being able to help the researcher's learning and indicated they found it helpful to talk about their experience. One spouse stated, "I think talking about [the ICU experience] has helped quite a bit. It has brought everything out in the open. It probably helped me to cope much better with the situation."

The researcher attempted to obtain a sample size that provided the data necessary to discover and saturate categories. Stern (1980) describes saturation of categories to mean that data are collected until the researcher is satisfied that no new information is being obtained that would explain a particular category discovered. The researcher stopped hearing new information after interviewing the fifth spouse but decided to interview two more spouses in order to confirm that no new data were being heard. Diers (1979) reports that the end of a study of this nature is arbitrary. It can be reached when categories have been saturated as much as possible or when the time limit set for the study has been reached. The researcher felt, however, that sufficient data needed to understand the important aspects of the spouses' experiences had been collected.

### **Data Analysis**

As Glaser and Strauss (1970) state, "in qualitative work there is no clear line between data collection and analysis, except during periods of systematic reflection" (p. 291). Thus, data analysis was not isolated from data collection. Throughout the data collection process, the researcher attempted to "make sense" of the intensive care hospitalization experience of the spouse whose mate is in the ICU following coronary artery bypass graft surgery.

Data analysis refers to the process used to make sense of the data in order to learn from the participants' responses what was not

previously understood (Bogdon & Taylor, 1975). More specifically, qualitative analysis is "the nonnumerical organization and interpretation of observations for the purpose of discovering important underlying dimensions and patterns of relationships" (Polit & Hungler, 1983, p. 620).

The open-ended questions used during data collection elicited a large amount of descriptive data from the participants which created a challenge during analysis. However, open-ended questions are essential if the phenomenon under study is complex or the relevant dimensions are unknown (Warren, 1978). Thus, the researcher looked for ways to systematically analyze the spouses' experiences in order to reduce the volumes of data into meaningful conceptual terms that would lead to a better understanding of the spouses' ICU experience. The researcher's approach to analyzing the data was guided by the work of Diers (1979), Gauchie (1982), Giorgi (1975), and Stern (1980), who made explicit the principles of qualitative research for analysis of data. The four steps below outline the researcher's method of data analysis.

#### **Step One: Discrimination**

The data transcribed from the semi-structured interviews were examined for similar and dissimilar parts. Responses that were similar were grouped together into categories. Categories are data which appear to cluster together (Stern, 1980). Differentiating like pieces of data from others has been referred to as discrimination (Diers, 1979; Giorgi, 1975).

### **Step Two: Definition**

After the data were examined and sorted into as many categories as possible, the researcher defined or stated as simply as possible the theme that dominated each category. The term "theme" refers to similar recurring responses that the data were grouped around.

### **Step Three: Identification**

After the researcher organized the spouses' explanations into categories that reflected their ICU experience, she began to look for relationships among the categories. She continued to examine, compare, and contrast the data until the relationships were identified. As interrelationships were identified, many of the developed categories were clustered together to form yet another category which was at a higher level of abstraction. Ray (1985) describes the process by which a researcher "uncovers the constituents of an experience" (p. 89) as identification.

### **Step Four: Integration**

After the categories were organized in a manner that would best describe the spouses' ICU experience, the researcher proceeded to examine the emerging categories in relation to the literature and the conceptual framework. The literature was selectively reviewed and integrated into the categories in order to compare the researcher's findings with those in the literature.

The process of data analysis will be discussed in greater detail in Chapter Three.

### Summary

This chapter has described the methodology used to explore the spouse's experience of having a mate in the ICU following coronary artery bypass graft surgery. Following a brief introduction to the methodology, the criteria for the selection of the participants and the selection procedure for obtaining the participants were described. The participants themselves were described along with the method used to secure consent from the mates and the spouses for the study. Finally, the processes of data collection and analysis were discussed as they relate to the phenomenological method of qualitative research.

## CHAPTER THREE

### The Process of Data Analysis

#### Introduction

In Chapter Two, a method of analyzing the spouses' accounts of their ICU experiences into an organizing framework that best described the common ICU experience of the spouses was introduced. As indicated earlier, the method of data analysis was adapted from the qualitative research works of Diers (1979), Gauchie (1982), Giorgi (1975) and Stern (1980), with selections and revisions made to enable the researcher to apply and communicate the process of analyzing the data. In this chapter, the process of how the data collected were analyzed will be explained in detail so that the reader will more fully understand the results of the study. The discussion will follow the researcher's analytic approach. For the purpose of clarity, the four steps of the process will be presented separately in this discussion. However, because data collection and analysis occurred simultaneously, the process of data analysis was a dynamic rather than a linear process.

#### Step One: Discrimination

After each interview, the tapes were transcribed and the transcriptions were duplicated. One was used as a working copy and the original was left untouched for the researcher to consult when necessary for the context of specific responses.

As each transcription arrived, it was read through to get a sense of the whole (Giorgi, 1975), then examined slowly and

carefully line by line for similar and dissimilar comments expressed by the participants. A system of color coding (Gauchie, 1982) was developed as the researcher began to group like responses together. For example, a spouse's comment about relationships was coded with a blue dot, and comments relating to information seeking were coded with a yellow dot. The researcher then collected all the data with the same color dot and grouped them together on a reference sheet with the color of the dot indicated in the upper left hand corner. These reference sheets provided an overview of the data by organizing and displaying the data in the various categories.

Three numbers were recorded on the reference sheet beside each comment. The numbers referred to the specific participant, the number of the interview, and the page number of the transcribed interview. The researcher felt this approach facilitated sorting of the data and also organized the responses into a form suitable for analysis.

During this step, not only was each piece of datum compared with every other piece of datum in the same interview, but as more data were collected they were compared with existing categories of data on the reference sheets. Stern (1980) refers to this method as continuous comparative analysis. Objectively and systematically, data were either assigned to existing categories or used to generate a new category.



### Step Two: Definition

The second step of defining the categories was closely associated with the first step of discrimination. As the researcher organized the spouses' accounts into categories, she stated the theme that dominated each color coded category by defining appropriate concept labels for each category. Concepts are abstractions of concrete events which represent ways of perceiving phenomena (Norris, 1982). Concepts have many levels of abstraction and each level of abstraction includes relating concepts which are conceptualized at a lower level of abstraction (Norris, 1982). Although the various concept labels varied in relation to level of abstraction, they were stated as simply as possible and often in terms the spouses had used themselves. For example, comments such as, "I don't know how anybody gets through if they haven't got another member of the family or a close friend at the time to support them," "I had a lot of support from my family," and "Being with the other families was a big support," were grouped together on a reference sheet with a red dot and defined as "support." Thus, "support" was the theme that dominated that particular category.

After the concept labels had been defined for all existing categories, the important aspects of the spouse's experience became apparent. In order to establish if the generated themes did in fact represent the spouse's perspective, the themes that emerged determined the nature of the second interview with the participant

spouses. For example, the concept of support needed to be clarified, validated, and/or rejected. During the second interview, the researcher sought information concerning the importance, nature, source and availability of support. Thus, participants who generated the data were asked to support or reject the researcher's analysis of that data.

### **Step Three: Identification**

An abundant number of categories evolved during steps one and two. The researcher began to compare these categories and look for relationships between them. As relationships were identified, various categories collapsed to form one category conceptualized at a higher level of abstraction by the researcher. For example, obtaining information from the library, watching hospital video on the ICU, and asking questions, became "seeking information," while faith in God, confidence in physicians, belief that mate is getting the best care possible, and comparing, became "generating hope." In addition, seeking information, generating hope, developing a support network, distracting self, remaining near mate, helping mate, and reorganizing roles and responsibilities became properties of the concept "coping categories." Thus, the researcher identified relationships between categories that seemed to cluster or connect together (Stern, 1980). Diers (1979) reports that reworking the categories again and again is the major portion of data analysis. Clustering of categories at this point is a more theoretical form of

analysis than the earlier clustering of similarities and differences among the data.

The researcher sought additional information from the spouses to be certain the categories were saturated (Stern, 1980). For example, with respect to the category of "coping strategies," the researcher continued asking questions until she heard nothing new about that aspect of the experience. The researcher also continued to explore with the spouses during the second interview, topics related to the already formed concepts for the purpose of altering, verifying, and/or rejecting the developing framework. Some categories required modification and were divided to form other categories. For example, as the researcher developed a fuller understanding of the spouse's ICU experience, it became apparent that the category "comparing" was part of the categories "generating hope" and "determining mate's progress." It became clear that comparing needed to be subsumed under both categories because the spouses reported comparing their mate's condition to that of other patients in an attempt to generate hope and determine their mate's progress.

In the course of examining the data analysis worksheets, the researcher identified a series of events or phases that each spouse experienced. A phase is "one of several periods whose beginning and end are usually marked by some important change" (Lofland & Lofland, 1984, p. 105). The phases, which were experienced in a time

sequence, centered around the event of coronary artery bypass graft surgery. Although the researcher had originally planned to study only the spouses' ICU experience, the participants explained the meaning of their ICU experience by discussing it within the context of the total surgical experience. It became apparent that the spouses perceived the ICU experience as one event among others that contributed to the experience of having a mate who was undergoing coronary artery bypass graft surgery.

The phases, which were experienced by all spouses, were identified as the pre-surgery experience, waiting during the surgery experience, and the post-surgery experience. These separate yet related phases seemed to yield a meaningful way for the spouses to interpret and make sense of their experience.

The researcher also noted several conceptual categories that appeared to cluster together into two major themes. Although the spouses progressed through the phases over a period of time, it became clear that the two major themes of "reaction to the situation" and "coping with the situation" existed throughout the entire surgical experience. Kaplan (1962) refers to the concept of situation as a "segment of experience" (p. 19). He states that new situations create a new set of circumstances in which an individual is required to make an adjustment. During each phase the participants were faced with a new situation. The spouses described their psychosocial reactions to each situation and how they coped

with the various aspects of each situation. Coping "refers to dealing with situations that present a threat to the individual so as to resolve uncomfortable feelings" (Miller, 1983, p. 16). It seemed that the spouses used specific coping strategies to deal with the various aspects of the entire surgical experience. Thus, the manner in which the spouses made adjustments in order to deal with the psychosocial reactions created by the new situations, can be thought of as coping.

Grasping the totality of how significant aspects of an experience fit together and form the participant's viewpoint is the major challenge of qualitative research (Leininger, 1985). By structuring the data in terms of phases and themes, the researcher was able to meaningfully understand and communicate the spouses' experience of having a mate who was undergoing coronary artery bypass graft surgery. The organizing framework presented below was generated from the spouses' accounts to organize and make sense of their related surgical experience.

**Table 1**  
**Phases and Themes**

Phases	Themes
Pre-Surgery Experience	Reaction to the Situation Coping with the Situation
Waiting During Surgery Experience	
Post-Surgery Experience	

#### **Step Four: Integration**

As the study proceeded and the developed categories became clear, the researcher selectively examined existing literature and integrated relevant aspects of other authors' writings with the findings of the present study. The literature was used to help explain the significant aspects of the experience. For example, Lange's (1978) discussion on hope as a complex human experience that wards off despair during uncertain times, became supportive data for the present study. It helped explain why generating hope was an important coping strategy for the spouses throughout the entire experience. The literature was carefully examined, used as data and integrated into the findings of the study in order to explain the spouses' related experience (Stern, 1980).

During this step, the researcher also integrated Kleinman's (1978) conceptual framework with the phases and themes of the experience to enrich understanding of the popular system of the health care system. The spouses' psychosocial reactions and the manner in which they coped with these reactions, in relation to each phase of the surgical experience, contributed to the development of the spouses' explanatory models. Kleinman (1978) stresses the importance of understanding how individuals perceive and deal with an illness experience. By integrating the two major themes with the three phases of the surgical experience, the researcher was able to interpret from the spouses' perspective the psychological and sociocultural aspects of this particular surgical experience.

As stated in Chapter One, the spouse, as a member of the popular system, has certain beliefs, expectations, roles and explanatory models in experiencing and perceiving an episode of sickness (Kleinman, 1978). Since the professional system, with its beliefs, expectations, roles and explanatory models interacts with the popular system, any documented or discovered discrepancies between the systems were discussed and woven through the description of the experience. Thus, Kleinman's (1978) conceptual framework provided direction for the researcher to analyze the participant's subjective experience within the broader sociocultural context.

### Summary

This chapter has described the method used during the process of data analysis. Using supportive data, the researcher illustrated the four steps of data analysis derived from the qualitative research work of Diers (1979), Gauchie (1982), Giorgi (1975), and Stern (1980). The process of analysis permitted development of an organizational framework which described the spouse's experience of having a mate who was undergoing coronary artery bypass graft surgery, in a meaningful way which has both accuracy and applicability. In the following chapter, an elaboration on the developed organizational framework with integration of the participants' accounts, conceptual framework and pertinent literature will be presented in order to enhance understanding of the spouses' experience.

## CHAPTER FOUR

### Presentation and Discussion of Research Findings

#### Introduction

The purpose of this chapter is to present and integrate the findings from this study with the conceptual framework and literature relevant to the spouses' accounts in order to enhance the understanding of the spouses' experience of having a mate in the ICU following coronary artery bypass graft surgery. The discussion will be highlighted with verbatim excerpts from the participants' accounts to sensitize the reader to the spouses' viewpoints (Knafi & Howard, 1984).

Although the experience of each spouse was described in a unique manner, consistent with his/her particular personality, similar phases and themes occurred repeatedly in the spouses' accounts. This finding is consistent with Lipowski's (1969) assumption that although every episode of illness is a unique experience, common trends may be found.

The participants located the ICU experience within the context of their experience with their mate's coronary artery bypass graft surgery. The spouses described their ICU experience as one event among others which comprised the entire surgical experience rather than as a discrete, independent incident. While the spouses talked about their experience in the ICU, they made reference to prior events such as deciding to proceed with surgery, waiting for the



surgery and waiting during the surgery. They wanted to describe the significant events related to their ICU experience. One spouse stated, "Can I go right back and maybe you'll begin to understand what this whole thing to me is all about. Have you got lots of time?" From the data analysis it was evident that the spouse's surgical experience could be viewed as comprising three phases that contributed to the experience of having a mate who was undergoing coronary artery bypass graft surgery:

1. pre-surgery experience
2. waiting during surgery experience
3. post-surgery experience

Throughout the phases, the themes of "reaction to the situation" and "coping with the situation" occurred. As indicated in Chapter Three, the concept of situation refers to a "segment of experience" (Kaplan, 1962, p. 15). Each phase represented a new situation for the spouses. The participants described and explained how they reacted to and coped with the new set of circumstances created by each new situation. Lipowski (1969) discusses the importance of understanding how individuals experience a particular illness and how they cope or fail to cope with it. The relationship between the two major themes identified by the spouses is articulated clearly in Lipowski's (1969) concept of the "total human response" (p. 1198). Lipowski (1969) reports that how an individual experiences a particular illness episode, what it means to him/her,

and how this meaning influences the individual's behavior and interaction with others are all integral components of the "total human response" to a particular illness episode. The researcher conceptualized the psychosocial impact of the surgical experience upon the spouses as "reaction to the situation," and the behavior the spouses used to deal with the surgical experience as "coping with the situation." The following paragraphs introduce the two identified themes. The relationship and interaction between the themes and the phases will be further explained in the presentation of the spouses' accounts.

### **Reaction to the Situation**

It is generally acknowledged that the psychological and social aspects of an individual's illness experience needs to be understood and should influence the interventions health professionals direct toward individuals (Lipowski, 1969). Kleinman (1978) views sickness as an abstract concept consisting of psychological and sociocultural aspects. As the participants described and explained their experience with their mate's coronary artery bypass graft surgery, the psychosocial impact of the surgical experience upon their everyday lives became apparent. The spouses' descriptions focused upon their thoughts, feelings, behaviors, philosophy, and interaction with others during the three phases of the surgical experience. Lipowski (1969) describes the psychological reaction to illness as including an intrapsychic and a social aspect. The

intrapsychic aspect refers to what individuals perceive, feel, and think, whereas the social aspect encompasses an individual's interaction with others. The meaning of illness results from a combination of the perceptual, emotional, and cognitive components (Lipowski, 1969). Thus, it seemed appropriate for the researcher to organize several conceptual categories such as thoughts, feelings, philosophy, and interaction with others into one major theme called "reaction to the situation" because the categories were similar in substance. They represented the spouses' reactions to the various phases of the surgical experience.

The researcher noted that the spouses discussed at great length the fear of losing their mate. They became emotional as they described living with their mate who has heart disease, which is accepted as a life-threatening illness. The spouses also discussed their fear of coronary artery bypass graft surgery, which is considered by many individuals to be a life-threatening event. It became apparent that the spouses perceived coronary artery bypass graft surgery to be a life-threatening treatment for a life-threatening illness.

### **Coping with the Situation**

During the interviews, the participants described the manner in which they dealt with the threatened loss of a mate undergoing coronary artery bypass graft surgery during the various phases of the surgical experience. Lazarus (1966) uses the term "coping" to

refer to strategies used to deal with a threat. Threat refers to an anticipation of personal danger or harm, whether realistic or not, which may cause mental or physical suffering (Lazarus, 1966; Lipowski, 1969). The meaning that is attached to an experience determines the threat posed by that experience (Perlin & Schooler, 1978).

Other authors have defined coping differently. Coping has also been referred to as "the things that people do to avoid being harmed by life-strains" (Pearlin & Schooler, 1978, p. 2). Lazarus and Launier (1978) have attempted to narrow the scope of the concept of coping by writing that coping refers to action-oriented and intrapsychic efforts to manage or reduce environmental and internal demands which exceed an individual's resources. The spouses' processes of coping with the stress of everyday living became a common theme in the participants' accounts. Understanding how family members cope with stressful situations is important because empirical evidence is linking coping to successful individual adjustment (McCubbin et al., 1980).

Lipowski (1970) suggests that an individual's actions related to the illness experience can be subsumed under the concept of "coping behavior." Thus, the spouses' actions such as generating hope, seeking information, remaining near mate, developing a support network, helping mate, reorganizing roles and responsibilities, and distracting self were grouped together under the theme "coping with the situation."

Lazarus and Launier (1978) suggest that coping strategies are intended to serve two main functions, namely, altering stressful relationships between the individual and the environment, and regulating the emotional reaction resulting from the person-environment relationship. Coping strategies may also improve an individual's ability to deal with situations in a constructive manner (Brailey, 1984). McCubbin et al. (1980) report that four hypotheses have been suggested in the family-oriented coping studies they reviewed. They state that coping behaviors have been said to decrease the presence of vulnerability factors, such as emotional instability of a family member; strengthen or maintain family resources which protect the family from harm or disruption; reduce or eliminate stressor events and their specific hardships; and influence the environment by doing something to change the social circumstances. Pearlin and Schooler (1978) state that coping strategies are elicited to change the situation, control the meaning of the experience, and/or control the emotional distress created by the experience. It has also been proposed that coping strategies are influenced by the individual's meaning of the illness experience (Lipowski, 1970). Thus, it seemed that by using coping strategies the spouses were attempting to prevent, control, or minimize the psychosocial impact of the surgical experience.

The description and discussion that follow use the identified phases and themes as an organizing framework for presenting the spouses' accounts.

### **Pre-Surgery Experience**

During their pre-surgery experience, the spouses discussed their ambivalence towards coronary artery bypass graft surgery as a treatment for the mate's heart disease. The pre-surgery phase included the time spent deciding to proceed with surgery and waiting for the surgery. During this time, fear of losing the mate emerged as a common spousal reaction, while generating hope, seeking information, helping mate, and remaining near mate were voiced as important coping strategies.

### **Reaction to the Situation**

The spouses who considered coronary artery bypass graft surgery as an option for treating their mate's heart disease had either just dealt with the shock of a heart attack, or were watching their mate's condition deteriorate to the point where treatment by diet, exercise, and medication were not controlling symptoms. They saw themselves as having no alternative. The reason given for having the surgery was that it was the last resort. The reason seemed to justify their decision to proceed with the surgery. One spouse commented:

It was very difficult to resign myself to the fact that this surgery was going to happen. I had terrible doubts and fears.

I eventually sort of calmed down and accepted it. There was no other way out, there would have to be surgery.

Although the spouses were aware that the success rate of coronary artery bypass graft surgery is exceptionally high, they perceived it as a threat to their mate's life. To them, surgery meant taking a chance that life may or may not change for the better. While the expectation of a longer, healthier life for the mate was expressed, they feared the possibility of death or disability. One spouse expressed her feeling that, "Though I was happy that he could be helped, I was terribly afraid of the operation." Thus, the decision to undergo coronary artery bypass graft surgery was a difficult one for the spouses as they considered the risks. One spouse expressed her concerns:

Things could go wrong and you could be the odd one that could be the unlucky one. It was difficult for me to accept that and say O.K., go ahead with the surgery. I didn't want to take that risk. I had a lot of doubts and fears.

Fear has been defined as "a client-expressed or client-confirmed response of focused apprehension toward the presence of a recognized, usually external threat or danger to one's limb, autonomy, self-image, or community with others" (Jones & Jakob, 1981, p. 23). Hewitt (1984) reports that a threat of "the worst" is a powerful source of fear. The fear the spouses described that was associated with the threatened loss of their mates due to the unknown outcome of surgery, played a large role in the decision of

whether or not to undergo open heart surgery. This fear decreased only after the spouses had contact with their mates in the ICU following the operation.

After the decision had been made to proceed with coronary artery bypass graft surgery, the spouses began waiting for the surgery. Although this period of time varied among the study participants, it appeared most difficult for those whose mate's surgery had been delayed for any length of time. A study by Gillis (1984) demonstrated that spouses of coronary artery bypass graft surgery patients identified waiting for surgery as the most stressful aspect of the hospitalization experience. Gullo, Cherico, and Shadick (1974) reported that the outcome of a life-threatening illness remains uncertain for an unknown period of time and death is perceived as one of several possible outcomes. The spouses indicated that during this time they lived in constant fear that their mate would suffer a massive myocardial infarction and die before the operation. The following comment was made:

It was very difficult for me to accept what was happening and that you knew he was sort of sitting on a time bomb and he could have an attack at any time before the operation and it could be the end.

Similarly, another spouse described his feelings:

There was fear in the fact that when I would go to work knowing her condition, the doctor told me that she had a very serious heart disease, and I would phone a couple of times to see how



she was. There was that fear that, you know, maybe she would get a heart attack and I would come home and find her on the floor and who knows, maybe even dead.

It seemed that because the spouses' mates were in danger of dying from a heart attack, the spouses began to eagerly look forward to their mates' surgery. To them, coronary artery bypass graft surgery meant an opportunity for their mates to obtain relief from angina, regain health, and avoid the prospects of a heart attack. One spouse verbalized these feelings:

The doctors told us not that long ago that [my husband] couldn't have another heart attack and live. And we didn't know whether he was going to make it until surgery. So in a way we were quite happy when he had surgery because if he had had another one he wouldn't have lived through it.

However, despite the high hopes for a successful operation, and the desperate need to have their mates undergo coronary artery bypass graft surgery, the fear of the operation was not eliminated. As a result, one spouse described the operation as "both a blessing and a curse." Another spouse described it this way:

The doctor assured me that the success rate is quite high, like 98%. In 1983, he said that it was almost 99% in this hospital. Though that sounds very good and I wanted him to have the operation, I really thought he was going to die during the operation. You know there is always that chance. That was my worst fear and I didn't sleep well for weeks.

Thus, during this aspect of the surgical experience, fear continued to be a commonly expressed theme. However, this fear, which was related to the prospect of a heart attack, never decreased for some of the spouses. Even after the operation they feared a recurrent myocardial infarction.

### **Coping with the Situation**

During their pre-surgery experience, the spouses took active measures to cope with the emotional reactions arising from their mate's heart disease and impending surgery. Coping strategies such as generating hope, seeking information, helping mate, and remaining near mate were alternative ways the spouses dealt with the threat of losing their mate. The threatening nature of heart disease and coronary artery bypass graft surgery resulted in the spouses taking certain actions aimed at preventing, minimizing or controlling the impact of the anticipated threats. Lazarus (1966) refers to all strategies for dealing with threat as coping.

**Generating hope.** Generating hope emerged as an important way spouses coped with the implications of their mate's heart disease and impending surgery. Hope is a combination of feelings and thoughts which center on the belief that there are solutions to an individual's needs and problems (Lange, 1978). Hope makes life tolerable and meaningful during times of stress or transition (Korner, 1970; Lange, 1978; McGee, 1984). Korner (1970) refers to hope as a method of coping. He states the purpose of hope is to

ward off despair and permit the individual to deal with any situation in which his/her needs are not being met. Hope permits "desired future gratification to serve as an immediate relief for current discomfort" (Korner, 1970, p. 136).

Faith in God was a key factor in generating hope for many of the spouses. Hope was also generated by believing that the "odds" of the surgery were in their favor. Some of the spouses repeatedly made references to a person they knew who was "better off than ever" as a result of the surgery. Since the outcome of surgery was uncertain, this seemed to be an important factor in generating hope because seeing these individuals meant there was living proof that the operation can be successful. Korner (1970) points out that the more uncertain the outcome, the more an individual needs a defense against his/her fears and anxieties. "Hope induces a feeling of 'assumed certainty' that the dreaded will not happen, that despair will not occur" (Korner, 1970, p. 135).

All of the spouses discussed their feelings of hope and need to practise positive thinking. They talked about "hoping that everything would be right and that there would be a good future." None of the spouses remarked that they felt hopeless.

Molter (1979) utilized a list of 45 'need' statements which she had relatives of critically ill patients rank in order of significance. To feel there is hope was the highest ranking category. Hope was found to be the universal need identified as

very important by all relatives. The reason for this finding could be that hope is always associated with important personal issues and is of fundamental importance to the lives of all individuals (Korner, 1970).

**Seeking information.** Seeking information related to coronary artery disease and coronary artery bypass graft surgery was an activity that consumed much of the spouses' time. One spouse took a Cardiopulmonary Resuscitation (CPR) course "just in case" she would need to use it. Information was sought from several sources such as the family physician, the library, individuals they knew who had undergone heart surgery, and the B.C. Heart Foundation. It became evident in the accounts that the spouses knew and actively sought what information they wanted. However, this information was sometimes difficult to obtain. This point is illustrated in the account that follows:

I had been going to the library before the operation and reading great big books. Some I understood and some I didn't. All of the books that I found in the library went on that you didn't need surgery and I could find nothing on surgery.

Nothing on bypasses. I wish I were a little bit more informed.

Lazarus and Launier (1978) identify information seeking as a coping strategy individuals use to feel more in control of a situation. Since the spouses were closely involved in decision-making regarding surgery, their search for information was aimed at

obtaining sufficient knowledge in order to make appropriate decisions related to their mate's illness. Thus, seeking information helped the spouses to cope with their feelings of ambivalence towards the surgery. The information sought was also directed at trying to be better prepared for what was to come. One spouse stated, "My brother-in-law just had open heart surgery and I was really curious about everything. So I talked to his wife and tried to prepare myself that way."

**Helping mate.** Helping mate was conceptualized by the researcher as a coping strategy because it was a way in which the spouses appeared to deal with the threat of losing their mate. Since their mates experienced shortness of breath or chest pain with activity, the spouses had a compelling desire to do all they could to help their mate and prevent the symptoms from appearing. The spouses' knowledge about angina and its consequences may have elicited this particular coping strategy. However, sometimes the spouse's need to be helpful interfered with the mate's sense of independence and self reliance. One spouse admitted that his mate resented some of his help:

When we found out about her heart condition, the doctor said that although she had to exercise, she couldn't do anything strenuous. So I sort of definitely took over. I did the washing and cleaning, and matter of fact there were times when she was a little upset because I was doing too much and she felt that she was still capable.

Family members "rely on their own judgment, wisdom, and ingenuity for controlling symptoms" (Strauss et al., 1984, p. 49). Strauss et al. (1984) identify types of "assisting agents" that carry out various tasks in order to control an ill member's physical symptoms. Although protective agents were not clearly defined, their tasks were related to preventing injury and worsening of the illness. The participant spouses acted as protective agents toward their mates. They attempted to prevent the mate's illness from worsening. Several authors have reported that the wives of myocardial infarction patients demonstrate an overprotective attitude (Bilodeau & Hackett, 1971; Frank, Heller, & Kornfeld, 1972; Miller & Brewer, 1969). One participant discussed the dilemma of wanting to be helpful but not overprotective.

I want to do what's right and I don't want to be overprotective. I don't want to nag or do too much, and yet at the same time, I don't want to forget to do anything either.

Wright (1983) reports that "a certain amount of protection is good; more than that is detrimental" (p. 403). She points out that whether an individual is overprotective or not depends upon who is doing the judging. In other words, spouses perceived the help they were giving their mate as meeting the needs of the mate and controlling their symptoms at the same time. They did not view themselves as being overprotective.

**Remaining near mate.** All of the spouses coped with fear during the pre-surgery phase by remaining near the mate, feeling a strong

need to be near the mate as much as possible and for as long as possible. The participants stated they worried about the mate and were unable to concentrate when they were not in the mate's presence. By remaining near the mate they felt more comfortable just knowing the situation. One spouse described his feelings:

After my wife had her heart attack, I spent more time in the house with her. I used to go out and do some work in the workshop or go work in the yard. But after she had her heart attack, well, I just couldn't concentrate on things outside. I spent more time with her, we would go for walks. There were things I wanted to do, but I just put them off to do later. My main concern was to be with her.

During the pre-surgery phase of their surgical experience, spouses were confronted with deciding to proceed with surgery and waiting for the surgery. They coped with the fear of losing their mate by generating hope, seeking information, helping mate, and remaining near their mate. With hopes for a successful operation, the spouses began the second phase of the surgical experience: waiting during surgery.

### **Waiting During Surgery Experience**

The spouses did not mention the hospital admission or the time in hospital prior to their mate's surgery. Thus, this phase covers only the time spouses spent waiting while their mates were having coronary artery bypass graft surgery. Although the time was spent

differently by all of the spouses, they all agreed that this was an extremely anxiety-provoking time. During this phase, the spouses coped by generating hope and distracting self.

### **Reaction to the Situation**

All of the spouses agreed that their most difficult time during this experience was waiting while their mate was undergoing coronary artery bypass graft surgery. This finding supports Kathol's (1984) conclusion that the intraoperative period is the most stressful time for family members of surgical patients. Kathol (1984) offers a possible explanation. She points out that during this time, spouses are totally isolated from their mates and have no knowledge about their mate's condition. The spouse's accounts revealed that the time spent waiting during their mate's surgery was almost unbearable. One spouse said, "From the time of the operation until you hear from the doctor was the hardest part for me." It seemed what made this time so agonizing for the spouses was not knowing what was happening or what the outcome would be.

Although the fear of losing the mate continued to be a predominant thought for the spouse, they talked about the anxiety of waiting. One spouse stated, "The anxiety of waiting, you know. You wonder if he is going to make it through. It was really difficult for me." One spouse described his feeling this way:

It's the waiting around that really gets you down. I remember we sat and sat and sat. We just sat there and toughed it out.



I went around four-thirty and it was about a quarter to nine before the doctor came out to see us. So you see, I was getting quite anxious just wondering what was going on.

A review of the literature indicated that fear and anxiety are closely related. Jones and Jakob (1981) examined and differentiated between fear and anxiety. "The critical aspect which differentiated fear from anxiety was seen to be the client's awareness and identification of the object of dread and apprehension" (Jones & Jakob, 1981, p. 23). They defined anxiety as "a vague, uneasy sense of worry, nervousness, or anguish which is a reaction to an anticipated (often non-specific) danger to one's expectations" (Jones & Jakob, 1981, p. 23). The anxious individual has not as yet expressed the underlying feeling involved, such as fear, grief, conflict or insecurity (Jones & Jakob, 1984). Thus, an individual experiencing anxiety is unable to identify the specific source of the threat or what is threatened (Yocom, 1984). The spouses waiting during their mate's surgery knew the benefits and risks of the operation. However, at this time they did not clearly articulate what they were afraid of or what was actually being threatened.

### **Coping with the Situation**

As indicated earlier, all spouses agreed that waiting during surgery was an extremely anxiety provoking time. They attempted to alleviate or attenuate the uncomfortable feelings experienced as a result of this period of uncertainty by generating hope and distracting self.

### Generating hope.

It's a serious operation. Your life is really on the line.

It's not like fixing a broken leg or something like that. They actually stop the heart and manipulate it. You just hope that it gets going again.

During this time, the spouses continued to be hopeful. They generated hope by believing in God and having confidence in the mate's surgeon. Faith is an affective component of hope (Lange, 1978). "Faith is a positive belief that unknown forces can be relied on" (Lange, 1978, p. 179). Each spouse believed their mate's surgeon was "the best." Edwards (1982) suggests that the "unabashed adoration" patients have for heart surgeons may be the main factor in establishing confidence in their physician. Having confidence in their mate's surgeon helped minimize the spouse's fear (Thurer, Levine, & Thurer, 1980). Thurer et al. (1980) contribute to the understanding of the importance of having confidence in the surgeon. Their comment supports the researcher's findings:

This exaggerated positive regard [for surgeons] may have been an unconscious method of endearing oneself to one's doctor, so that the doctor may try harder. Certainly the patient does not wish to anger the surgeon, as he or she could very well take revenge on the operating table. Perhaps this esteem represented a way of minimizing the cognitive dissonance of being cut and probed by a less than perfect being, one capable

of human error. Or perhaps it was a reaction formation to a probable, but repressed, feeling of ambivalence toward an inherently contradictory figure who may be a bearer of bad news, one who may engender suffering and death (p. 287).

**Distracting self.** Miller (1983) writes about methods of self-distraction as strategies individuals use to deal with "otherwise continuous thoughts about an illness" (p. 27). Waiting during their mate's surgery became tolerable as the spouses diverted their attention from the life-threatening surgery in progress to other facets of living. During this phase, the spouses chose to work or spent the time in fellowship with others. It was a time they did not want to be alone. These self-distracting strategies were deliberately selected in order to occupy their minds with something other than the surgery. While his wife was undergoing surgery, one spouse from out of town spent his time in the waiting room with other patients' family members. He said:

A man I met was sitting there and talking to me. I suppose that made it a bit easier because if I was alone things would be running through my mind, and he kind of took things off my mind by telling me about his wife. And then there was this other gentleman. His wife was in and he was a real card. He joked about things and not everybody was so serious about things you know. We laughed and exchanged conversation, and I think it's important. I think it is. Rather than sitting

alone and waiting and waiting and waiting for the doctor, it sort of takes your mind off what the doctor is going to say.

However, one spouse's self-distracting strategy was not as effective as planned. She stated, "I went to work that day to keep my mind off it. It didn't keep it off it but it helped pass the time."

Another spouse was surprised at how easily she could be distracted and almost felt guilty about it.

I had periods during those hours when I was even playing cards with my family and stuff, and I was actually enjoying the game. And then I thought, what am I doing enjoying this game when my husband is having open heart surgery now. So then I would be what I thought a responsible wife should be and be very concerned, and then I'd do something else that distracted me and I'd be very surprised that I was distracted.

Buchanan (1984) refers to a conscious, deliberate, temporary inattention to a stressful situation as suppression. Suppression, which is a necessity, is usually achieved through distraction by physical exertion, hobbies, outside interests, and other people (Buchanan, 1984). Buchanan (1984) goes on to say:

Suppression can only follow confrontation. It is not avoidance for it does not balk at responsibility, nor does it hurt others, nor does it have long-term detrimental results. It is the healthy need to take a break from despair. (p. 84)

During the second phase of their surgical experience, the spouses coped with the emotional reactions experienced by generating hope and distracting self. By the time the spouses entered the ICU, they had already developed coping strategies to deal with their emotional reactions. However, changes occurred in how the spouses reacted to, and coped with, the post-surgery phase of the surgical experience.

### **Post-Surgery Experience**

The post-surgery experience consisted of the spouses' experience in the ICU following their mates' coronary artery bypass graft surgery. While recognizing that each spouse's manner of reacting to the situation was unique, it was nevertheless possible to identify reactions which were common to most of the individuals in the study. The spouses did not appear to progress through a series of successive stages, but rather experienced each response to varying degrees at the same time. The spouses coped during this phase of the surgical experience by generating hope, seeking information, helping mate, remaining near mate, developing a support network, and reorganizing roles and responsibilities.

### **Reaction to the Situation**

After obtaining information from the surgeon regarding the results of the coronary artery bypass graft operation and the status of their mates' condition, spouses entered the ICU to visit their mates.

All of the spouses perceived the ICU to be a place where their mates would receive "special care after surgery." They understood their mate's condition to be critical, which required "being on the monitor and continuous watching." One spouse described it this way:

I knew after he came out of surgery they would have to watch him closely just to make sure that there was no emergency and that things did not go wrong. I knew he needed special care because he would be a very sick man when he came out of surgery. He wouldn't be able to do a thing for himself, he would be too weak.

However, despite the spouses' preconceived notions about the seriousness of their mates' operation, it was during that first visit to the ICU that the spouses came face-to-face with the reality of the seriousness of having coronary artery bypass graft surgery. The following comments were made:

You know that you're going to be going into the Intensive Care Unit, but I don't think that you really realize how bad the period is until you see all those machines and everything going around there, and all those tubes that they have coming out. You don't realize how serious it really is and to what extent they have to go to when they have a serious operation like that.

Similarly, another spouse described her feelings:

The realization of just how major that surgery is I think all came to me when I saw him. Although I understood it and I

thought about it before, I never really understood it fully until I saw him in the Intensive Care Unit.

The gravity and inescapable reality of the situation seemed to "hit hardest" when the spouses entered the ICU and saw their mates with their surgical dressings, in and amongst the ICU equipment. Prior to this time, the spouse had talked or read about the surgery. Two spouses even viewed the hospital video on equipment and the care patients receive in the ICU following coronary artery bypass graft surgery. However, only after actually seeing their mate in the ICU did they understand the seriousness of what their mate had just gone through. Buchanan (1984) reports that people can only maximize their coping abilities once they acknowledge, at least to themselves, the reality of the situation.

The initial response to the ICU was described by the spouses as an extremely emotional time. Regardless of their preparation or past experience in the ICU, they described being in a state of shock. One spouse who had previously visited her husband in the ICU when he had a heart attack explained:

Surgery is a different thing altogether. There are no visible signs other than being pale if you have a heart attack. You don't have scars and tubes and things. You only have one heart monitor. I was shocked to see all this.

It seemed the more unexpected their mate's appearance was, the greater the degree of shock. One spouse described it best:

The first visit was a real shocker. Seeing all those tubes and wires and everything and all the nurses scurrying around doing the different things, it's quite a shock to your system right off the bat. I think the problem is you don't know exactly what to expect, so you walk in there and really it's quite a shock to you. You don't know what's happening.

All of the spouses described the shock of seeing their mate "looking like dead" when they first saw him/her in the ICU. One spouse expressed these feelings:

When you walk in and see them, it is quite a bit of a shock. They look, I guess you could best describe it like dead. You know, they lie there dead flat, the machine breathes for them and they have a terrible color. They look bluish. They look to me just like I think a cadaver would look.

The spouses' initial reaction may have been shock because it was a confirmation of their worst fears. Gullo et al. (1974) reported that even though individuals have suspicions about the nature of an illness, they are still shocked when their suspicions are confirmed. They state it is not so much a feeling of surprise, but rather a feeling of being "totally overwhelmed." It has been suggested that family members visiting an ICU can remain in shock for hours or even days (Delaney-Naumoff, 1980), and that from shock individuals emerge to a recognition of the seriousness of the situation (Gullo et al., 1974). As indicated earlier, it was during



that first visit that the spouses realized the seriousness of having coronary artery bypass graft surgery.

Although spouses expressed a sense of relief that the mate had survived the operation, the fear of losing the mate continued to plague them. One spouse who received "good news" that the surgery had been successfully performed stated:

When the doctor came up he told me, he said that surgery went very well. So I was relieved to know that because he said that sometimes things go wrong and they don't know why. But he said that surgery went very well. Well, now I knew that part, but even at this stage I knew something could happen.

Another spouse, whose news regarding his mate's surgery was not as encouraging, commented:

I'm very grateful my wife got through surgery because [the doctor] told us the possibilities that there was danger that something could maybe happen. In [my wife's] case they didn't do two. They should have done five, but they only did three. That was because they were too small or something, the doctor said. So I feel that er, matter of fact I think we ought to be prepared at all times and hope it doesn't happen, but you know she could maybe have a heart attack or something at any time.

Thus, regardless of the outcome of the surgery, the fear of losing the mate had not decreased. Roberts (1978) points out that fear occurs and remains in existence as long as an individual does not know what to expect in a given situation.

Fear was also associated with the equipment in the ICU and the unknown implications of touching the equipment. Most of the spouses reported fear of "doing harm." One spouse stated:

I walked into the room and sort of just stopped at the bed, afraid to go forward because there are so many wires coming out and you think if I knock one of those, what is going to be the result.

However, this reaction was only experienced during the initial encounter with the ICU. Most of the spouses reported that this fear decreased as their knowledge and familiarity with the equipment increased, and with the constant reassurance from health care professionals. A significant decrease in fear was reported by one of the spouses:

Gradually the horror show of that first entry into intensive care sort of gradually lessens and lessens. You sort of just accept what is. You are no longer afraid of the tubes that are there and you don't mind going straight to him and holding him, or even touching a tube and getting it unhooked if it's getting hooked up, or holding his hand if he's kinking the tube or something. There is no longer that sort of fright of everything.

From their accounts, it became evident that the spouses were frightened by the ICU equipment because there was little that looked or sounded familiar. They stated that with repeated exposure to the

ICU and explanations from health care professionals, the equipment was demystified, the ICU environment became familiar, and their fears were minimized. However, anxiety continued to be a persistent feeling because although the spouses felt threatened, the object of threat could not be readily identified. One spouse said, "I had a funny feeling, maybe apprehension. I didn't know how he was going to be or what I was going to find when I went in there." The spouses' anxiety resulted in somatic manifestations such as anorexia and insomnia.

The participants also stated that they never felt comfortable in the ICU's crowded facilities. Although the spouses attempted to stand quietly in an area so as not to disturb anything or anyone, they reported feeling that they were "in the way" and "bothering the nurses." These feelings persisted throughout the intensive care hospitalization period of their mate. Comments such as the following were made: "A person is just in the way really of the staff who are trying to do a good job," and "I like to do things for [my husband], but really one tends to always get the feeling one is in the way of professionals." Another spouse described it this way:

Today I was in there and they were bringing in a patient from the operating room and the nurse said, "Mr. S. would you excuse us for a minute. We're bringing in a patient, but you can come back after." So even if they weren't talking to [my wife] they'd be wanting to get by for the next patient and I always

felt that I was in the way. You know, there was once or twice when the nurse had to come and get blood or something and again I would have to kind of move away, and I was always feeling I may be intruding and in the way.

When individuals feel left out or do not feel capable of or responsible for doing anything, they feel helpless (Lange, 1978). The spouses talked about their feeling of helplessness. One spouse expressed these feelings:

It's very hard on spouses too, you know, seeing them the way they are with all those tubes and everything running through them, and seeing how sick they are, and knowing there's nothing you can do to help them other than just stand there and hold their hand. You feel so helpless.

Lange (1978) views helplessness similar to Roberts (1976), who defines helplessness as "the conviction that everything that can be done has been done, which results in an inability to mobilize energy and effort for intervening in illness" (p. 162). Thus, helplessness is a sense of being overwhelmed by the loss of control over the situation (Lange, 1978). Miller (1983) considers helplessness and powerlessness as synonymous terms. She states that powerlessness, which occurs for a variety of reasons, is "a perception that one's own actions will not affect an outcome" (p. 3). Since the spouses were experiencing the threatened loss of their mate and had no way of controlling or avoiding the threatened loss, they felt helpless.

For many individuals, the experience of illness and treatment results in the feeling of helplessness (Lange, 1978).

Many spouses also reported that their mates were on their minds constantly and that they were unable to concentrate on anything else such as their work or driving. It seemed they had little interest in anything else except what was related to the mate. Their conversations with friends, family, and health care professionals centered around the mates. Activities such as acquiring information and reorganizing their daily routine all focused on the mate. They also reported that they were not interested in participating in any social activities. It seemed they were too fatigued and preoccupied with thoughts of the mate to enjoy social contacts. They verbalized that they were just content to visit their mates as frequently and for as long as possible. Most of the spouses even stated that they were so preoccupied with the mate that they became oblivious to the ICU surroundings. One spouse talked about his reaction:

I think that everyone is so involved with their own spouse that you just don't hear anything else that is going on. Once you're in there with her, you seem to be in a world of your own. You may glance over at the other patients, but really I don't think you know that they exist. You are just concentrating on your wife and you forget the rest of the world, really.

Lindemann (1944) indicated that preoccupation is a manifestation of anticipatory grief. Anticipating grief has been

defined as a grief reaction which occurs in individuals threatened with the possible loss of a loved one (Aldrich, 1974; Lindemann, 1944). Since coronary artery disease and coronary artery bypass graft surgery are traditionally accompanied by the threat of death (Rakoczy, 1977), spouses may experience anticipatory grief reactions. However, a spouse's preoccupation with the thoughts of his/her mate could reflect the importance of the event to the individual. Within some families, the seriousness and importance of an illness is relative to other family problems (Jacobson & Eickhorn, 1964). Warren (1978) offers another possible explanation. She points out that when individuals are ill they become dependent on those who care for them. As a result, family members may react by making the individual the center of their attention and do whatever they can to help. Anthony (1970) agrees, reporting that ill individuals become special and their family members suffer with them and share with them in the self-preoccupation imposed by illness. Thus, spouses may be preoccupied with thoughts of their mates because of the illness itself and not because they are experiencing anticipatory grief. However, one of the spouses did express feelings of anticipatory grief:

I was telling my son the feeling I had when the nurse told me that machine respirator was doing all the breathing for him and we said, "Is he not breathing on his own?" And he said, "No, he is not breathing. The respirator is doing it all for him at

the moment." I really sort of felt at that point then, that he was dead. I could not reach him, that was the sort of feeling that I had, because he was unconscious. There was no communication. I just could not reach him anyway. He was dead. He was so white, sort of, you know, so cold, and it was like experiencing what or what partially what it would possibly be like if he had to die. [My son] said, "Why did you feel that he was dead? His heart was beating and it's just the machine that was helping him to breathe." But when I don't see a person breathing, I say that person is dead. But at the same time there is at the back of my mind far away, I thought he is dead, but he is sort of dead on a very temporary basis. He will come back and that was a sort of consolation for me. And I thought when a person really does die that must be terribly, like suffocating. I don't know how to describe it to you. What must the depths of feeling be like when you really lose a person and there is no coming back. And that's the reality that hits you at that time when they are so deeply unconscious and they're so cold and they look so clear and white when they come out of surgery. So I guess you sort of get just a taste of what the sorrow could be, what grief could be like. Just a short glimpse of what it would probably be like.

Aldrich (1974) points out that anticipatory grief occurs prior to or in anticipation of a loss. As a result, the concept of

anticipatory grief may be applicable to individuals experiencing a life-threatening situation. The spouses' accounts revealed that only one spouse identified anticipatory grief in response to her mate's appearance in the ICU.

The spouses also indicated that this was a time for reassessing priorities in their life. They spoke of appreciating life more now, and "having another chance to make the best of life." One spouse described it this way:

You all of a sudden reassess your whole priorities. You never gave it too much thought before, you're not that old at 55. But, my goodness, I think now that you shouldn't work always for the future. That day may never come. In a few years we'll do this and we'll do that. Let's enjoy it while we still have it. You might not have each other later.

Confrontation with a serious illness experience alters one's approach to the future (Gullo et al., 1974). The "brush with death" (Gullo et al., 1974, p. 62) resulted in a greater appreciation of life and new life goals. Some spouses even talked about the positive benefits which resulted from the surgical experience:

It [surgical experience] makes me realize how fortunate we are. It could have gone the other way. It makes me appreciate life more and it makes me want to be good because here we are, we've been saved. I'm not a bad little fellow, but from now on we are going to practise all good clean living.



Similarly, another spouse described her feelings:

It's been a very educational and learning time for me. Prior to my husband's heart attack, I knew nothing about the heart. We just have one and it's great, but I now know more about the heart than probably the average person knows. All of us are heading towards heart attacks just by our diets alone before we even have a cigarette, if you choose to have a cigarette. I regret not learning sooner but I've learned it now. I don't know if you can help other people with your knowledge because sometimes people have to go through it themselves to really appreciate life.

Gullo et al. (1974) report that individuals who are able to perceive that they have profited in some way from the illness experience are less likely to encounter severe problems of adjustment during the recovery process.

### **Coping with the Situation**

During the post-surgery experience, the spouses identified a number of coping strategies used to deal with the situation. Although coping is a "highly individualized defense against threats aroused in highly individualized situations" (Pearlin & Schooler, 1978, p. 2), the coping strategies the spouses used during their mate's stay in the ICU were similar. The participants described generating hope, seeking information, helping mate, remaining near mate, developing a support network, and reorganizing roles and

responsibilities as strategies used to cope during this time.

Pearlin and Schooler (1978) refer to specific coping efforts as behaviors, cognitions, and perceptions that individuals use to deal with the "life-strains" they encounter. They also report that the "right" personality characteristics will help an individual deal with external threats. In fact, evidence indicates that psychological disposition is most effective in helping people to deal with situations over which they have little control (Pearlin & Schooler, 1978). However, it is also evident that a repertoire of coping strategies is more efficient in helping an individual deal with emotional situations than the nature of any one coping element (Pearlin & Schooler, 1978).

**Generating hope.** The spouses generated hope by believing in God, believing in themselves, believing their mate was receiving the best health care possible, and by comparing their mate's progress to that of other patients in the ICU. Miller (1983) reports that hope is derived from spiritual well-being. By believing in God, the spouses were able to generate hope when it was so desperately needed. One spouse commented, "I think believing in God is one of the main things. You have to draw strength from somewhere." Having a relationship with God alleviates aloneness and provides individuals with the ability to cope with stress and overcome it (Miller, 1983). One spouse described it this way:

And of course the greatest support, in fact the support, is the faith that one has. Because there's a God above looking after all of us. In spite of one's doubts and fears that he's not going to pull through, God will help us through. We all have to go through pain in life, and if we accept that he is watching over us and won't give us more than we can bear, and with that hope it becomes easier. When you turn to God things become easier. It is amazing what a quick prayer can do for you. It gives you that strength to pick yourself up and face it again.

Some spouses stated that the surgical experience had caused them to return to religious help and prayer. A possible explanation is that having faith gave them a sense of control during this uncertain time (Miller, 1983).

Two of the spouses interviewed, who did not believe in God, relied on inner strength. They recognized that they had coped in the past with stressful situations and could cope now because they had "to carry on." One spouse stated:

I can do most things. I know about finances and all that kind of stuff. When we built our house, I did most of the contracting and that kind of stuff. So I'm not helpless. I would probably feel that for a while if something happened to him, but I think I could pull myself together and manage. I feel that most women have a lot of strength when they have to,

myself included. I really think so. We have something extra that men don't have. I believe that. When it comes to the crunch, we always come through. I really believe that.

From the accounts given by the participants, it was evident that the spouses continued to cope with the surgical experience by having confidence in the health care professionals and believing their mates were receiving the best health care possible. Hope appeared to be generated by the spouse believing their mates were in "capable hands" should something happen. Although some comments included nurses, most mentioned their strong faith in their mates' physicians. The following comments are presented to demonstrate the confidence expressed by the spouses about the providers of health care: "I have so much faith in the doctors and in the nursing staff that I really feel at ease." "I just put my faith in the people here and I hope that the right things are done, and I'm sure they are." "If anything goes wrong it is unforeseen. They can make a mistake just like I can, but they do everything possible to rectify their mistakes. I am full of confidence in them." One spouse said:

After having this operation, I knew she needed special care because it's quite a shock to your system. I knew she had to be monitored on the different machines to make sure that everything is functioning properly and if something does go wrong the nurses and the doctors are there. They can rectify or they can do something to help her along. And if anything

goes wrong then there is somebody there, a trained person that knows exactly what to do and how to help her.

By believing in their caregivers, individuals can obtain sufficient moral support and courage to face all problems with a state of emotional balance (Kraines, 1943).

To sustain hope, individuals attempt to make sense of their reality by scanning the environment for clues (Lange, 1978). By believing they have grounds for hope, they are reassured (Lange, 1978). The spouses also generated hope by believing their mates were doing better than other patients. They began to compare their mate's condition with that of someone less fortunate. One spouse said, "It's nice to see the other patients because there is always somebody worse than you are." By seeking a frame of reference, the spouses compared their mates' recovery with that of others and were inspired with hope. The spouses also evaluated their mate's progress in relation to his/her previous condition. As the spouses compared their mate's present condition to his/her past condition, they were able to orientate themselves and make sense of their mate's recovery.

Pearlin and Schooler (1978) report that by making positive comparisons, individuals are attempting to control the meaning of the situation. Since the meaning that is attached to an experience determines the threat posed by that experience (Pearlin & Schooler, 1978), by judging their mate's condition to be less severe than

another patient's, the spouses were able to perceive the experience as less threatening and more hopeful. The way in which an individual perceives reality is the cognitive component of hope (Lange, 1978). The cognitive component of hope protects the affective components of hope from threatening reality facts (Lange, 1978). Thus, by interpreting and giving meaning to their experience in a cognitive way, the spouses were able to deal with their emotional reactions.

Thus, generating hope emerged as an important coping strategy the spouses used to deal with the uncertainties of their post-surgery experience.

**Seeking information.** The spouses continued to spend a great deal of time acquiring information about their mates' condition and the ICU environment. Individuals who are feeling helpless use "seeking information" as a coping strategy to feel more in control of a situation (Lazarus & Launier, 1978; Moos & Tsu, 1977). The spouses sought information from several sources such as the researcher, health care professionals, other patients' family members, and their mate.

Although the spouses wanted to know about the purpose of each machine, they were mainly interested in seeking information about their mate's progress. The questions raised by the spouses indicated that they sought specific information about their mate's progress, but some had mixed feelings about hearing the answers to their questions. One spouse said:

I asked [the doctor] what advantage is there to this operation. Is it going to, you know, make everything like it was. It's a question I have and yet I don't want to really go into it. I want to know and yet I don't want to know.

However, the participants all agreed that if their mates were recovering poorly, they would want to know the truth.

The spouses' accounts indicated that during this time they sought information about their mate's present condition, how their mate spent the night, vital signs, medications, diet, removal of equipment, and estimated time of discharge from the ICU. It became evident that the spouses needed the information explained to them in a variety of ways, repeated often, and in terms that would help them understand the situation. It also became apparent that while all spouses wanted information about the ICU prior to their encounter with it, some did not take advantage of viewing the hospital video on the care and equipment patients receive in the ICU following coronary artery bypass graft surgery. One spouse said, "I didn't want to watch the video. I'm a real chicken."

The physicians were perceived by many of the spouses to be the most important source of information. Two spouses were uncertain about the nurse's role in relation to providing information. The following comments were made: "I don't know if the nurses are allowed to tell you how they are actually doing," and "I always thought that if you want to know more about the patient, you have to

refer to the doctor, but [my daughter] says the nurses will explain to you if you ask."

The participants reported that the health care professionals were always willing to answer their questions about their mate's progress. However the spouses stated that they only approached certain health professionals with their questions. If they perceived the health professional to be unapproachable, their questions went unanswered. The following comments were made:

Usually I do ask questions, but I didn't ask today. I think it all depends on who's sitting there, what nurse is sitting there. Some are very friendly and talkative and down to earth, and some just keep writing and minding their own business, so I didn't ask.

Similarly, another spouse described her feelings:

[The nurse] said maybe you should speak to [the doctor] again, so that he can explain to you what is going on. And at that point this guy came along, he happened to come into the room. And the nurse whispered something to him, and he said, "I've spoken to her." After a few minutes he came to me and said, "Are you getting all the answers to your questions?" I didn't quite like his attitude. It was very cold, that attitude. So whatever questions I may have wanted to ask would not come out, because I thought, "You wouldn't understand if I asked you. So what's the point of me talking to you." So my answer is yes, it's O.K.



The participants indicated that not only did they not understand the meaning of what they saw in the ICU, but they also did not have the knowledge and confidence to communicate with health care professionals. One spouse felt that if he had asked, health care professionals would have told him what he needed to know. He said:

My daughter told me I should ask what's that machine or what's that, or how's her heart, and does that indicate her blood pressure and the likes of this. And some people maybe do. I feel that I'm afraid to do that. I think the nurses would tell me how she felt and her blood pressure and how her heart is. I guess it is just, I didn't think I was shy, but maybe I don't know how to ask questions, specially with medical people like doctors and nurses.

Inconsistent or inadequate information coupled with inability to communicate with the mate's caregivers contributed to spouses' feelings of helplessness.

The spouses continued to seek information from individuals who had already experienced coronary artery bypass graft surgery, either as a patient or as a family member. However, they now sought information related to the ICU environment and recovery from coronary artery bypass graft surgery. Although these individuals were accessible sources of information, spouses were not always satisfied with what they learned from them. One spouse expressed his feelings:

We talked to other families when they were sitting in the lounge, and we talked to other people that had this operation, before we came into hospital. We talked to some of them and asked them how things were going. Really, you don't learn much from them because everybody seems to play down everything. I guess they don't want to tell you how things are. And the people in the lounge there, they don't do that much talking. They don't seem to want to talk about the operation. And even some of the patients who had had the operation and were up here recuperating, even they didn't have that much to say. So really, you don't learn much from them.

In their attempt to regain a sense of having some control, the spouses relied heavily on environmental cues to determine how their mates were progressing. Instead of depending solely on verbal communication with others, the spouses determined progress by comparing the mate's condition to that of other patients, observing for removal of equipment, and comparing the mate's present and previous status. One spouse spoke in defense of comparing:

Although the doctor on the video says never compare your case with the next one because there is always a difference, you do. It is very hard not to compare because you meet over there in waiting time in between visits and you hear them say, "Oh my guy is doing fine, he's out of intensive care," but my guy is still struggling in intensive care. You are beginning to

think, is my man really going to make it? And it is difficult not to compare when you see these guys in the Intensive Care Unit. The guy that was operated on just the day before my husband and he's on his way out of intensive care, and my guy hasn't passed the first stage yet.

Many of the participants indicated that they watched their mate's monitors as well as the monitors of the other patients, trying to obtain clues about their mate's condition. Although the monitors became an important source of information, they had difficulty interpreting the meaning of what they saw and heard. For example, one spouse said, "When I heard the bells and stuff today, I immediately thought something is wrong. His heart is stopping." One spouse described it this way:

We were told what the machines were measuring. That one recording those figures is the blood pressure and that's the pulse. Then you say, O.K. the pulse is normal around about 70 or 65. Then you see the blood pressure, what is the normal blood pressure around about 40 or something over 20. Any figures around about that or a little higher or lower, you think fine. He's not too bad, acceptable. But when you go in and see these figures are way out, you wonder what's happening.

Since the monitors were an important source of information for the spouse, when they were not registering correctly, the spouse had difficulty in deciding how seriously ill the mate was. One spouse

who relied heavily on the information from the monitors was upset when she was told the machine was inaccurate. She stated:

The nurse must have realized we were a bit worried looking at the figures, and he came up and said, "Don't worry about the machine registering like that." You know, if that machine is giving you vital information about the patient's pulse and blood pressure, it should be accurate all of the time. Why should it keep going haywire? Then I say, how reliable is that machine really. It happened so much that we began to wonder is the reading coming out now really the reading or is the machine playing up again. Then I would ask the nurse, "Is the machine registering correctly?"

The participants also questioned information that was not compatible with the meaning they had assigned to their observations. One spouse described the following occurrence:

When [my husband] began to talk a bit, he wasn't very coherent and it was difficult to sort of understand what he was saying and his movements were slow. I put it down to intravenous and the things that were in him. Then it began to worry me because he wasn't very coherent and sometimes he'd talk a bit of rubbish, and it made me wonder what's going on. Has the anesthesia been too much for him, has it affected his brain? Has he got brain damage? Is he going to be like this always? Has he had a stroke or something? And then I asked the nurse.

I said, "Did he have a stroke? Why is he like that?" She said no and reassured me that he hadn't. But even though she said that, you still have your doubts. Are the nursing staff hiding something from me? Are they not giving me the full facts because they don't want to upset me? I mean, I can see what is going on, and people who've had a stroke behave like this. So he must have had a stroke.

Even though the spouse had been reassured, she was still afraid because the information given was not what she needed to deal with her fear.

The spouses, as active participants in the surgical experience, sought information from several sources in an active manner in order to determine the mate's progress and gain a sense of control in the ICU setting. They also sought ways in which they could become actively involved in the care of their mate.

**Helping mate.** During the post-surgical experience, the spouses coped with their feelings of helplessness by attempting to be helpful to their mates. All of the spouses reported that they would do anything to help their mates, and at the same time, stay out of the health professionals' way. One spouse stated, "If I can make him comfortable in any way while I'm there and stay out of the nurses' way and let them do their job, then that's all I care about."

Although all spouses desired to help their mates, some were uncertain about how to help. However, the majority of the spouses

reported they had the opportunity to participate in their mates' care, and identified the ways in which they had been helpful to their mates. Some talked about becoming involved in the physical care, such as bathing and shaving their mate. Others talked about the emotional help they had given their mates, such as encouragement and support. One spouse stated, "Everytime I went there, I knew what was expected of me, and the best thing to do was to keep her calm and not to get her more upset then she was."

Another spouse commented that her presence and loving concern were important and essential to her mate's recovery. She said:

The kind nurses will attend to him and give him his medications to ease his suffering, his physical pain; but with what he is going through, he needs me there with him when he's going through it. And if he is not going to have me come and support him every day, he's going to feel terribly alone, and he will have an added pain, an emotional pain.

With respect to the extent of involvement that they wanted or were capable of, the spouses were able to recognize their strengths and weaknesses. They knew they lacked nursing knowledge about critical care, but they felt that they could communicate better with their mate than the health professionals could. One spouse said, "She would tell me things she wouldn't tell a nurse." The spouses also reported that if the health professionals experienced difficulties in getting their mate to cooperate, they could

communicate with their mate and encourage them to cooperate. One spouse described her feelings this way:

I think if there is anything that the spouse could do to help the patient along and therefore help the doctors along, I would do it, perhaps in talking to him, you know. I mean maybe through fear or something, the patient will just lie there and won't respond. Maybe they are going through so much that they think, "What is the point?" They get frustrated. They just don't cooperate any more. We don't know what is going through their mind, so the only thing to do is to encourage him. So then I take it upon myself in the course of my chatting with him and telling him to get better soon. I bring up different things and say, whatever the doctors and nurses are telling you, you must do exactly what they tell you because if you don't cooperate with them, you're not going to come out from here, you're going to be longer in here. You must do what they ask you to do and then you'll get better.

As stated earlier, individuals experiencing an illness require the assistance of family members to help them with their day-to-day living. Strauss et al. (1984) refer to protective agents as those individuals who help the ill member by protecting him/her from harm and further worsening of the illness. During the post-surgery phases, the spouses continued to help their mates by acting as protective agents. They appeared to be attempting to protect their

mates in order that their condition would not worsen and their recovery would be facilitated. Protecting their mate consisted of acting strong, withholding information, and avoiding potentially disturbing topics of communication.

All of the spouses talked about "putting on a front" for their mate and "acting strong." This means that they would present themselves as strong, competent, and able to deal with the situation (Geary, 1979). They did not want their mates to know how fatigued and scared they were because they did not want to upset them. The following comments were made:

Especially now, I tend to take more care and be very much aware of looking neat and fresh each time I walk into the intensive care unit. Even though I'm feeling tired and just about ready to collapse, I've got to go into the washroom and I've got to tidy myself up and make myself look fresh, because if he's going to see me haggard and tired, it is going to upset him. You don't want him to know that you are going through a rough period as well.

Similarly, another spouse said:

You've got to put up a good front no matter how lousy you feel before surgery, during, and whenever. You can fall to pieces now and then on your own, but you pull yourself together again before you see him.

Geary (1979) reports that acting strong also serves an individual function. She states that as a result of acting strong,



individuals view themselves as competent and capable. The researcher noted that the spouses took pride in their ability to control their emotions in front of their mates. However, they also reported that putting on a front for their mate was a "terrific struggle" and consumed a great deal of energy.

Some of the spouses wanted to spare their mates worry, and therefore, restricted the flow of information. While many of the spouses preferred not to openly discuss "bad news" in the mate's presence, others withheld information that might be potentially disturbing to the mate. One spouse said:

They didn't do a triple bypass as planned. They only did two because one vein was a little small. I still haven't mentioned anything to [my wife] because, you know, she's doing so good and you don't like to say well, you only got a double bypass and not the triple.

During this phase, the spouses attempted to be helpful to their mates and protect them from anything that could have a potentially adverse effect on the recovery process.

**Remaining near mate.** When an individual is admitted to an ICU, family members remain nearby because they feel more comfortable knowing the situation and are also more likely to receive information from health care professionals if they are present (West, 1975). During the post-surgery phase, all of the spouses coped by remaining near their mates. It seemed to be difficult for

the spouses to be away from their mates for any length of time. One spouse said, "I want to be here all the time and I never wander away farther than just down the street to the restaurant and back again." This finding is consistent with Geary (1979) who also found that relatives of patients in the ICU cope by remaining near the patient.

The spouses spent long hours in the waiting room. At this particular hospital, the waiting room is located on a different floor from the ICU. Although it was a space the spouses needed to be with their families or the families of other patients, some spouses thought it should be located just outside the ICU. The following comments were made: "I mean right outside there, there's no waiting room," and "I thought there should be a place right outside for someone to sit. There isn't even a seat out there." However, others felt the location of the waiting room did not create any problem. One spouse stated the following in defense of its location.

It is just one floor away which didn't seem like a problem. In fact, I think it is better because you know you are sitting in the lounge there and talking to somebody or reading a book and then it's time to go down and see how she's doing again, so you get up and walk around and down the stairs, and it kind of gives you a little more courage. It gives you time to think about what you are doing.

The accounts further indicated that changes were made to enable the spouse to spend more time with their mate. For example, the

spouses from out of town relocated while others took time off from work in order to remain near their mate. One spouse stated, "I'm very fortunate to be temporarily unemployed so that I can visit my husband any time of the day or night that I am allowed to."

Vaillot (1970) contends that hope is inspired in an ill individual by having the family near. Remaining near the patient signifies that family members have not given up on the patient and they consider him/her to be still part of the family (Geary, 1979). By remaining near their mate, the spouses were actively demonstrating their support to their mate.

At this particular hospital, visiting hours are from twelve noon to eight-thirty at night. Although the spouses appreciated the flexibility in visiting during this time period, they reported that it was important for them to see their mates when they wanted to and for as long as they wanted. As indicated in the following accounts, spouses know the amount of time they need to remain near their mate in order to facilitate their ability to cope.

The first night I was allowed to see him about one half-hour after he returned from surgery and I didn't want to leave and I had to leave and I didn't want to. I wanted to be by his side. I didn't want to do anything else.

Similarly, another spouse stated:

I really think that being in there for five minutes, especially the first day, that's probably long enough anyway, because you

get all choked up and your stomach starts having butterflies, and you start to feel a little bit afraid sometimes. So really, I think that's long enough.

Thus, the amount of time needed to spend with the mates varied from one spouse to another. Stillwell (1984) states that family members visiting in an ICU may have difficulty believing what is happening, which may influence the frequency with which they need to visit their ill relative.

The spouses voiced that their presence was not only valued by their mates, but that it was "important to their recovery." However, they reported that if health professionals were busy with the mates or if the mate was tired, they were willing to visit at a more convenient time.

I knew my husband wanted me to stay and he was feeling pretty good. He wanted me there. And if I ever felt he was too tired, and I hope I used good judgement, then I always got out of there because I know it's important that he doesn't get over tired.

While the spouses provided comfort and support to their mates, they attempted to deal with the post-surgery phase of the surgical experience by drawing on the support of others.

**Developing a support network.** Support has been defined as any action or behavior that assists an individual in dealing with the demands of a particular situation (Tolsdorf, 1976). Support may be

tangible, in the form of financial aid or temporary housing, or it may be intangible, in the form of encouragement, sociability, or emotional support (Crauen and Wellman, 1973). Bott (1971) defines a network as "all or some of the social units (individuals and groups) with whom a particular individual or group is in contact" (p. 320). The participants' accounts revealed that health care professionals, other patients' family members, close friends, and relatives represented a number of individuals in the network who provided support for them during the post-surgical experience. While Hopson and Adams (1976) claim that the effective use of support can change feelings of powerlessness to feelings of self worth, McGee (1984) proposes that the perceived helpfulness of others constitutes an important dimension of hope. By developing a support network, the spouses were better able to cope during this time. This finding is consistent with the results of Tolsdorf's (1976) research work. Tolsdorf (1976) found "network mobilization" to be an important coping mechanism medical patients used following their perception of stress.

Many spouses did not perceive the role of the nurse as providing support for family members; they believed that nurses were there to provide nursing care to the mate only. One spouse remarked, "As long as he's getting looked after, I shouldn't even worry about myself." However, although all of the spouses agreed that the care of their mate was the "key thing," they also felt the

need for support from health care professionals. One spouse said, "It seems like everybody is so involved with the patient, and the wife or husband I'm quite sure is stressed out too." Another spouse verbalized her need for support this way:

I see the nurse as being concerned about the spouse or the family, because the family is going through a lot of suffering as well just seeing their loved one over there suffering. The family is worried, but if you get back reassurance from the nursing staff attending your husband or family member that's ill, it helps you. You don't go away so terribly in despair, you know what's happening and you are part of it. Especially, I take my own case, my husband and I are so close that if either one is lying there, the other one is going through a hard time. And to get concerned nursing staff also looking after the feelings of the other half of the pair, then you don't feel cut off. You are treating the patient and bringing him back to life, but there is another part of that same person who is sick in a different way and therefore also needs treatment by kindness, understanding or even perhaps a touch on the arm which means I care.

Research has emphasized the role of social support in protecting individuals against the effects of stressors, and promoting an individual's recovery from stress (McCubbin et al., 1980). Cobb (1976) reports that social support is a major factor in

helping individuals adapt to a stressful life event. Norbeck (1981) agrees and adds that individuals are responsive to social support during times of stress and crisis. Social support has been conceptualized as information leading the individual to believe that he/she "is cared for and loved, esteemed, and a member of a network of mutual obligations" (Cobb, 1976, p. 300). Thus, the information exchanged provides an individual with emotional support, leading the individual to believe that he/she is cared for and loved; esteem support, leading the individual to believe he/she is esteemed and valued; and network support, leading an individual to believe he/she belongs to a network involving mutual obligation and understanding (McCubbin et al., 1980). The spouses expressed a desire to receive support from the nurses, but perceived this to be unrealistic in the present health care system.

I always thought the nurses were there just for the patient, not for the family. I don't see them as being supportive to the family, and that is not to say that they are not. It's just that I haven't had much contact with them. They are professional people doing a great, great job in this hospital. My husband's care was exceptional, but they have so much to do, and under our present system, I'm not sure whether they would have the time to take care of the spouse too.

Despite these feelings, health care professionals were reported as an important source of support. The specific kinds of support received from them came in the form of kindness, consideration,

understanding and reassurance. The spouses also indicated that being able to verbalize their experience and having someone listen was invaluable.

It helps to talk about the experience that you are going through. Especially if you can get somebody who really listens, you know. It's not everybody you feel you can be free to talk with about your feelings. But when you talk about it, it's a big release and generally lessens the burden.

Although the spouses had positive feelings towards the nursing staff they perceived the first nurse that took care of their mate as being "the best," "terrific," "really special," and a "super human being," while the others "didn't seem to quite match up." One spouse described it this way:

The very first nurse that was at my husband's bedside when I saw him, I just loved her dearly. She was so supportive. I'm sure no matter which nurse had been standing there at that time, I would have loved. But, she was so compassionate, and so kind, and went out of her way to make me feel comfortable. I'll always remember her. Every nurse my husband had was real special. They were all excellent. But the first one was the best.

However, it seemed that although the spouses needed support from health care professionals, they needed the support of those who knew them best. As a result they sought the support of family members and friends.



When you feel very alone, you want somebody whom you really know. Because the nurse is kind and good, but she doesn't know you. You need somebody who really knows you and really understands what you're about. Why you are the way you are at the moment, and what sort of support you really need. It is only very close friends or family members who are really close to you that can give you that support, that understanding, that love that you need at this time.

The comfort and support received from friends and family members was perceived to be the greatest source of support. The support received from them was nonspecific. The spouses were comforted by just being with them. For many spouses, the time they needed support the most was when they visited their mate in the ICU. For various reasons, family members were not always available to support the spouse during visiting hours. The participants mentioned the need to have a close friend with them at this time, but knew that was not in keeping with hospital regulations. As a result, they visited on their own. One spouse explained:

I don't like going on my own to see him. Although I have to go when my son is at work, I watch the clock for my son to come. It seems that all I see going on with him is easier to take when I've got somebody with me. They restrict the visiting to family members only and I take that to mean immediate family like sons, daughters, or wife. But there are times when I

felt, when my son was at work, that it would be helpful if there could be a really very, very close friend with me. But restricting it to immediate family like when there is only one son, one child, when the child is not there, I'm left completely on my own.

The family members who were perceived as a source of support were also seen as a source of stress. Some spouses referred to them as an "added burden." It seemed that during this time the spouses were too much in need of support to give much support beyond the needs of their mate. The following comments were made:

For me it was as I would imagine for any other parent, it was an added sort of feeling of concern for the feelings of your child. You are concerned for what your child is going through. You see the sufferings of that child and that is an added hurt to you because of your husband's condition. You try to get him to talk as well about his feelings so that you can support him as well. So you get sort of like a double burden, but then also a shared burden.

Similarly, another spouse described her feelings:

Most of our children are [out of town]. And so there was just one son here and he was very supportive. But if they'd all been here, I probably would have felt the burden because each one would need you. They'd be worried about their dad and everything. I would have felt spread too thin.

A research study that investigated the stress, support, and coping of medical patients, also demonstrated that stress originated from within the support network (Tolsdorf, 1976). While the spouses attempted to give as well as receive support, Tolsdorf (1976) found that individuals withdrew from the stress-producing portion of their support network in order to avoid the additional stress.

The participants also reported receiving support from other patients' family members, particularly from those who had or were experiencing a similar stress situation. Other patients' spouses were perceived as being helpful because they offered encouragement and really "knew what it's like." One spouse stated, "It gave you strength to know that you weren't alone, that there were other people in the same predicament you were, so it helps you along quite a bit." Another spouse stated:

We all sat there. There were two ladies whose husbands had been in. And everybody is sort of mingling. And it makes you feel like you're not alone. There're other people with problems and they all seem to be coming through alright, and there's no reason why you shouldn't.

Thus the development of a support network appeared to be an essential aspect of helping the spouses cope with the stresses associated with the post-surgical experience. Reorganizing home routines and usual patterns of functioning appeared to be another way the spouses coped with the present situation.

**Reorganizing roles and responsibilities.** Olsen (1970) points out that,

Serious illness often precipitates a crisis within the family, throwing the highly organized family system into disequilibrium. Established roles and rules must change to meet the crisis, and the family needs to reorganize to gain a new equilibrium. (p. 169)

Changes in roles and responsibilities occurred for all of the spouses during the post-surgical experience. Role is defined as a "set of behaviors characteristic of or expected of an individual who is interacting with or reacting to another individual within the context of a particular social stratum or setting" (Balistriari & Jiricka, 1984, p. 180). Changes in roles and responsibilities are reported to be common family occurrences following the illness of a family member (Anthony, 1970; Bell, 1979; Brown, 1979). Usual patterns of family functioning may also be altered as a result of the illness of one family member (Jillings, 1981). Meleis (1975) discussed role transition and reported that individuals add or delete roles from a preexisting set of roles when a health-illness transition occurs. The spouses discussed the roles they retained, relinquished, and acquired. It seemed that by reorganizing, the spouses were able to remain near their mates, and, at the same time, fulfill their roles and responsibilities.

Many spouses reported a disruption in their daily routines and the "mad rush" they were now experiencing. They spent long hours in

the hospital and stated they "did not have time" and "were not in the mood" to do anything in the house. They seemed too fatigued and disinterested to do anything that was not related directly to their mates. However, some responsibilities were considered essential and could not be deferred regardless of time and energy.

I knew if I didn't do the laundry I'd have problems because I was going to work the rest of the week. I knew it had to be done, it wasn't something I could say, oh forget that, I'll do it when [my husband] is out of the hospital. That was something that had to be done.

Many of the spouses stated they would "catch up on things they hadn't done" and resume their routines when their mate returned home from the hospital.

Shifts occurred in long-established patterns of day functioning. Several spouses reported an increase in roles and responsibilities that previously had been shared or done by their mate. Such activities included laundry, preparing meals, banking, and driving. Although these role changes were perceived to be temporary, some spouses recognized the benefits of being familiar with each other's responsibilities. One spouse made this comment:

[My wife] is so well organized like you would not believe. She's the banker, she's handled all the money, she's handled all the business, all the affairs, everything. Now she comes into hospital and I want to phone one of her friends. I don't

even know where the phone book is. A simple thing like that. The worst thing I have ever done is to rely on her like that, not looking over one another's shoulders. Now I've been doing a course on banking, how much we got and how much we owe.

None of the spouses in the study had children living at home, but one spouse was responsible for the care of her elderly mother. She found this to be an added strain on her ability to cope with her mate's illness. At times she experienced difficulty in getting help with the care of her mother. She said,

I look after my mother, she's 80. I now have to make sure I get her somewhere to be looked after before I go to the hospital, because she can't see too well and her memory is really bad, so I daren't leave her alone. So it is finding someone to come in or take her out besides worrying about everything else.

In order to deal with day-to-day living during the post-surgery experience, the spouses reorganized their roles and responsibilities to accommodate the changes imposed upon them.

### **Summary**

This chapter has presented and discussed the spouses' experiences of having a mate in the ICU following coronary artery bypass graft surgery. The study found that the ICU experience is perceived to be one facet of the spouses' experience with their mate's coronary artery bypass graft surgery. The spouses described

and explained the surgical experience as consisting of three phases: pre-surgery; waiting during surgery; and post-surgery.

The process of accepting open heart surgery as a solution to their mate's deteriorating condition was described as an important aspect of the surgical experience. During the interview process, the spouses attempted to attach meaning to their mate's coronary artery disease and its surgical treatment. It became evident that the spouses perceived coronary artery bypass graft surgery to be a life-threatening treatment for a life-threatening illness.

The process of making sense of the ICU experience also involved an examination of the events that occurred prior to the intensive care phase of their mate's hospitalization. By making reference to prior events such as waiting for the surgery and waiting during the surgery, the spouses were able to interpret and attach meaning to the entire surgical experience.

Throughout the interviews, the spouses described and explained the emotional impact of the entire surgical experience upon them. They discussed their reaction to the new set of circumstances created by each phase of the surgical experience. While fear of losing their mate occurred throughout the entire surgical experience, the participants' accounts revealed that spouses experience the greatest amount of anxiety while they are waiting during their mate's surgery. Kathol (1984) also found the intraoperative period to be the most stressful time for family

members of surgical patients. The spouses also reported experiencing a variety of reactions during the post-surgery phase of the surgical experience. They described feelings of shock, helplessness, and being in the way. These findings support the research work of Miller (1983). Miller (1983) reports that threatening experiences and the uncertainty that accompanies illness may lead individuals to experience a sense of loss of control. The inability of individuals to exert control over their environment results in uncomfortable feelings such as helplessness (Miller, 1983). In order to alleviate their perceived lack of control and deal with their emotional reactions, the spouses developed a repertoire of coping strategies.

During the interviews, the spouses described the manner in which they dealt with the threatened loss of their mate during each phase of the surgical experience. The theme of "coping with the situation" emerged from the analysis of data and was largely supported by the research work of Lazarus and Launier (1978). Lazarus (1966) describes coping as all the strategies individuals use to deal with a threat. The coping strategies the spouses used to deal with the threatened loss of their mate were intended to alter the stressful situation or modify the emotional reaction elicited as a result of the stressful situation (Lazarus & Launier, 1978). Although the coping strategies varied somewhat during each phase, they were described as important aspects of the surgical experience that the spouses needed to explain.



Kleinman (1978) states that all attempts to understand sickness and its treatment can be thought of as explanatory models. By eliciting the spouses' perceptions of their experience with their mate's coronary artery bypass graft surgery, the researcher was able to gain a better understanding of the spouses' explanatory model associated with a life-threatening illness experience. Kleinman (1978) proposes that eliciting the client's explanatory model will enhance health professionals' understanding of the client's perspective and facilitate clinical communication and client satisfaction with care.

In this chapter the emergent findings were presented and discussed concurrently using pertinent literature in order to enhance understanding of the spouses' experience. The following chapter presents a summary and the conclusions of the study, as well as implications for nursing practice, education, and research.

## CHAPTER FIVE

### Summary, Conclusions, and Implications for Nursing

#### Summary

In this final chapter a summary of the study is presented, major conclusions are drawn, and implications for nursing practice, education, and research are delineated.

This study was designed to gain an understanding of a spouse's experience of having a mate in the ICU following coronary artery bypass graft surgery. It was recognized that a serious illness with concurrent hospitalization in an ICU will have an impact on family members. Few researchers, however, have described the ways in which spouses are affected when their mates are hospitalized in an ICU. Therefore, this study aimed to describe and explain the spouses' perceptions of their experience with an ICU. It was further recognized that knowledge based on research about the spouses' perspective would provide a valid basis for decision making in the areas of clinical practice, education, administration, and research.

Kleinman's (1978) conceptual framework guided the development of the research question and provided the focus for data collection and analysis. Kleinman conceptualizes the health care system as a sociocultural system consisting of three distinct but interacting systems within which sickness is experienced and reacted to. These are the professional, the popular, and the folk. Each system may interpret and explain the same sickness episode differently.

Kleinman has proposed that all attempts to understand sickness and its treatment can be thought of as explanatory models. Explanatory models are ways of experiencing and perceiving an episode of sickness and its treatment, and therefore, influence the behavior that perception evokes. Explanatory models can be elicited from individuals in each system of the health care system for a particular sickness episode. When individuals from the various systems interact, their explanatory models may conflict and impede the delivery of health care (Kleinman, 1978). By eliciting the client's explanatory models, health professionals can predict conflicts which may arise when interactions between the popular and professional systems occur. Recognition of the differing explanatory models and attempts to negotiate between the discrepant explanatory models of clients and health professionals should prevent major conflicts and misunderstandings in health care transactions (Kleinman, 1978). Thus, Kleinman's conceptual framework directed the researcher to elicit the spouses' explanatory models by exploring their perspective of their experience with the ICU.

To determine the spouses' perspective, a qualitative research method based on the theoretical perspective of phenomenology was used. The phenomenological approach is congruent with Kleinman's conceptual framework since both emphasize that individuals perceive and give meaning to the reality they experience in everyday life.

By utilizing a phenomenological perspective, the researcher was able to understand the spouses' ICU experience from their point of view.

The researcher elicited the spouses' viewpoints through semi-structured interviews. The study sample consisted of seven spouses, four women and three men, whose mates were hospitalized in an ICU following coronary artery bypass graft surgery. The interviews were tape-recorded in order to have accurate verbatim accounts of the interviewee's responses. The spouses were interviewed on two occasions, once while their mate was still in the ICU and once shortly following their mate's discharge from the ICU. Data were collected using a semi-structured interview guide adapted from the work of other researchers (see Appendix F). Additional questions were generated from the spouses' accounts in order to obtain clarification and/or elaboration of the spouses' responses. A total of 13 in-depth interviews were conducted over a 3 month period. During each interview, the participants explained how they interpreted and gave meaning to events that occurred prior to and during their mate's hospitalization in the ICU. The spouses' perspective of their experience became evident as they described and explained how they reacted to and coped with their mates' coronary artery bypass graft surgery.

Data were analyzed simultaneously with and following data collection. Responses that were similar were grouped together into categories. After the data were examined and sorted into

categories, the researcher defined the theme that dominated each category. The themes that emerged from the data were clarified, validated, and/or rejected by the participants during subsequent interviews. As relationships between the categories were identified, the important aspects of the spouses' experiences became apparent.

The findings revealed that the spouses located the ICU experience within the context of their experience with their mate's coronary artery bypass graft surgery. The spouses understood and made sense of the ICU experience by attaching meaning to specific events that related to the entire surgical experience. They perceived the surgical experience as consisting of three distinct but interrelated phases: pre-surgery; waiting during surgery; and post-surgery. During each phase, the spouses described and explained how they reacted to and coped with each new situation. These two themes, "reaction to the situation" and "coping with the situation," appeared as threads throughout the entire surgical experience. By organizing the data in relation to phases and themes, the researcher was able to meaningfully understand and communicate the spouses' entire surgical experience. A summary of the research findings are presented in Table 2.

**Table 2**  
**Summary of Research Findings**

Phases	Reaction to the Situation	Coping with the Situation
Pre-Surgery	Ambivalence Fear	Generating Hope Seeking Information Helping Mate Remaining Near Mate
Waiting During Surgery	Fear Anxiety	Generating Hope Distracting Self
Post-Surgery	Shock Relief Fear Anxiety In the Way Helpless Preoccupation with Mate	Generating Hope Seeking Information Helping Mate Remaining Near Mate Developing a Support Network Reorganizing Roles and Responsibilities

### **Conclusions**

Interview responses from spouses whose mates have been hospitalized in an ICU following coronary artery bypass graft surgery have been presented and discussed in Chapter Four. In view of the study discussion, the following conclusions can be drawn:

1. Spouses of patients undergoing coronary artery bypass graft surgery have explanatory models which can only be understood by exploring their perspective of the illness experience. When given the opportunity, spouses are able to describe and explain important aspects of the experience and their meaning.
2. A spouse's experience with an ICU is located within the context of the entire illness experience. If the spouse's ICU experience is

to be understood, it must be examined in relation to the entire illness experience rather than as a discrete, independent event.

3. Spouses of patients undergoing coronary artery bypass graft surgery experience a variety of reactions in response to the various aspects of the surgical experience. They utilize a repertoire of strategies to cope, but still require assistance to deal with these reactions.

4. Spouses of patients undergoing coronary artery bypass graft surgery are in need of support during the post-surgical experience. Health care professionals, other patients' family members, close friends, and relatives represent a number of individuals who provide support for them during this time.

5. Spouses of patients undergoing coronary artery bypass graft surgery may not initiate conversation with health professionals. This does not mean they have no questions or concerns, but rather that they lack the knowledge and confidence to communicate with health professionals, that they perceive health professionals as not approachable, or that they simply do not want to "bother" the health professionals.

6. Spouses of patients undergoing coronary artery bypass graft surgery report waiting during surgery as the most difficult aspect of the entire surgical experience.

7. A life-threatening illness is not an isolated experience for the patient only. The surgical experience was associated with

changes for the spouse. All spouses reported experiencing changes in their roles and daily routines as a result of the surgical experience.

8. Despite exceptionally high success rates, coronary artery bypass graft surgery is perceived by spouses to be a life-threatening treatment for their mate's life-threatening illness. Thus, deciding to proceed with coronary artery bypass graft surgery is a difficult decision for spouses to make.

9. The findings indicate that the spouse's fear of the ICU environment decreased as their knowledge and familiarity with the equipment increased, and with constant reassurance from health care professionals. However, the fear associated with the possibility of losing their mate remained constant throughout the entire surgical experience regardless of the outcome of surgery.

10. Spouses of patients undergoing coronary artery bypass graft surgery need information explained to them in a variety of ways, repeated often, and in terms that help them understand the situation.

### **Implications for Nursing Practice**

The purpose of this study was to understand the spouses' ICU experience in order to provide a valid basis for appropriate and timely nursing interventions. The findings of the study suggest several implications for nursing practice, which are not new or unique but are nonetheless important.



The findings suggest that a patient's life-threatening illness has an appreciable impact on his/her spouse. Since spouses influence and are influenced by their mates' illness (Litman, 1974; Olsen, 1970), a thorough nursing assessment should include an assessment of the spouses' perception of the illness experience and their needs. It should not be assumed that spouses perceive their mate's illness the same way health professionals do. In order for the nurse to determine the impact of the current situation upon the spouse, an ongoing assessment is necessary. Assessment of spouses of coronary artery bypass patients should include gathering information about their understanding of their mate's illness, the impact of the situation, and strategies used to cope with the situation.

Planning for spouses of coronary artery bypass patients should include measures to promote the spouse's ability to cope with the situation. Health professionals must know the usual reactions to a given situation, the typical coping strategies used to deal with the situation, and their role in facilitating the coping process. Sensitivity to the effects that hospital regulations and routine actions have on spouses may result in alterations with positive consequences for patients and spouses (Moos & Tsu, 1977). Nursing care should be planned with this information in mind. It is important to remember that a combination of coping strategies can more effectively help a spouse deal with the situation than a singly

used coping strategy (Pearlin & Schooler, 1978). However, spouses should not be encouraged to use a particular coping strategy just because it worked for someone else. Thus, with effective planning, spouses can be better prepared to deal with the impact of a mate's illness.

Spouses may be resourceful in the strategies they use to deal with the impact of the mate's illness. However, since spouses are unfamiliar with the ICU and the mate's condition is uncertain, they rely on the interventions of health professionals to help them cope with the situation. Nursing interventions should consist of creating a climate where spouses feel comfortable voicing their fears or concerns and asking questions.

A spouse's first visit to see his/her mate in an ICU is an extremely emotional time. Spouses need information about what to expect when they visit their mate in the ICU. However, the information they receive may not condition them to see their mate unresponsive and surrounded by unfamiliar equipment (Owens, 1981). During this time spouses need reassurance that their mate is doing well. They also need to be encouraged not to be afraid of coming near the bed and touching their mate. Since visiting can be stressful, the nurse should validate with the spouse what his/her needs are at this particular time.

With each visit, nurses should provide information that is relevant to the spouse. In order to provide appropriate

information, spouses must be given the opportunity to articulate, from their point of view, what is important for them to know at that time. Providing information based only on a professional perspective may result in ineffective nursing care. Nurses should be mindful of the difficulties of learning in a stressful situation, and recognize that spouses may require the same explanation on consecutive visits to the ICU. Spouses may also need information explained to them in different ways. For example, findings in this study showed that while viewing the hospital video on the equipment and care patients receive in the ICU may decrease anxiety in some spouses, others refused to view the video because they believed it would increase their anxiety.

As indicated earlier, spouses visiting their mate in the ICU may not initiate conversation with health professionals because they perceive health professionals to be unapproachable or because they do not want to bother them. Thus, it is important for health professionals to remember that communication occurs verbally and nonverbally. It is recommended that an effort be made to communicate to the spouse, both verbally and nonverbally, that health professionals are there to provide care to the patient and his/her spouse.

Spouses of patients undergoing coronary artery bypass graft surgery see themselves as protectors of their mates. They are anxious about their uncertain future and want to prevent their

mate's illness from worsening. Health professionals should acknowledge this role as a way in which spouses cope with the threatened loss of their mate.

Since spouses "act strong" and avoid potentially disturbing topics of communication in their mate's presence, it is suggested that nurses attempt to spend a few minutes with the spouse away from his/her mate's bedside. During this time nurses can answer questions, correct any misconceptions, and provide an opportunity for spouses to describe their reaction to what they have just seen and heard.

Nurses may anticipate that spouses need to remain near their mate and be helpful to their mate in order to cope with the situation. However, nurses should avoid assuming that all spouses require similar involvement to facilitate their coping. The spouses' perspective of what their own needs are must be taken into account. Requests for flexible visiting privileges and involvement in patient care may require negotiations to occur between health professionals and the spouse. Kleinman et al. (1978) suggest that in order for a mutual understanding to be reached between the popular and professional systems, both will have to explain their perception of the situation. Discrepancies between the explanatory models will have to be negotiated in order to reduce dissatisfaction with nursing care. Thus, if the plan for nursing care is to be truly comprehensive, nurses must listen to the concerns of the

spouse from the spouse's perspective and take these into account in the provision of nursing care.

### **Implications for Nursing Education**

Nursing education should prepare the nurse to provide nursing care to spouses of patients experiencing a life-threatening illness. Spousal relationships and the effect of the threat of loss on the spouse should be emphasized. Nurses must be prepared to assess spouses' reactions to the threatened loss of their mates and help spouses cope with their reactions. Skills in assessing, planning, intervening and evaluating with spouses of seriously ill patients should be part of all nursing programs.

All nursing programs need to prepare students to elicit the spouses' perspective of a particular episode of illness in order to gain a better understanding of their point of view. Nursing students should also be prepared to explain their point of view to the spouse. The students need to understand that an episode of illness may be perceived differently by spouses and health care professionals, and that these discrepancies may impede the delivery of mutually satisfying nursing care. Nursing students must realize that once there is a mutual understanding of why individuals respond to a situation in a specific way, then negotiations related to treatment and expected outcomes can occur. Clinical strategies for negotiating between explanatory models in order to facilitate mutually satisfying nursing care should be taught to students in all

levels of nursing education. The importance of working together to decrease conflicts and misunderstandings that occur between the various sectors of the health care system must be emphasized.

The concepts of fear and hope should be included in nursing curricula and identified in the phases of the spouse's surgical experience. Opportunity should be provided for the student to provide nursing care to a spouse in each phase of the surgical experience.

### **Implications for Nursing Research**

This study has provided further knowledge about the spouses' perspective which has contributed to the overall understanding of the effect of coronary artery bypass graft surgery on the spouse. In view of the findings, several areas for further study are suggested.

In an effort to further clarify the spouse's experience of having a mate in the ICU, a replication of this study might be conducted with modification of the sample. Perhaps the ICU experience is different for spouses of patients diagnosed with other disease conditions. Perhaps spouses of trauma patients or patients who are admitted to an ICU as a result of complications have a different experience with the ICU. Further investigations using in-depth exploration of the spouse's perspective could provide valuable insight into the ICU experience of a spouse whose mate has an acute or chronic condition.

This study provided data on how spouses retrospectively perceived the waiting period prior to and during surgery. Subsequent studies conducted during the actual waiting period would add to the body of knowledge about the spouse's experience prior to cardiac surgery.

Further research is also needed to explore how and when spouses should be prepared for the ICU phase of their mate's hospitalization. It is clear that this is an extremely emotional time. Perhaps the amount, kind, mode of delivery and/or time of delivery of information will decrease the impact of the spouse's initial contact with the ICU. Such knowledge is essential to the planning of effective nursing care.

Finally, a study of the effects of planned nursing interventions during each phase of the spouse's surgical experience will provide insights into the ways in which nursing may be able to influence the spouse's ability to cope.

Comprehensive nursing care encompasses not only the care of the patients but also the supportive nursing care of family members. Nurses can assist spouses to prepare for, and cope with, their mate's coronary artery bypass graft surgery by using knowledge based on empirical research findings.

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**APPENDIX B****Letter to Director of Nursing Service**

Dear

I am a registered nurse and at present I am a student in the Master of Science in Nursing Program at the University of British Columbia. I am doing a study to describe the spouse's experience of having a mate in the Intensive Care Unit following coronary artery bypass graft surgery.

My interest in this area developed through exposure to the spouses of my patients during my clinical experience. I have worked in intensive care units for six years, and specifically with patients having coronary artery bypass graft surgery for three years. I believe that if nurses are more aware of the spouse's experience, we can more effectively prepare others to cope during this period of hospitalization.

To conduct this study, I plan to use the case study method in order to gain an in-depth understanding of the spouse's experience. I plan to interview the spouses of patients who have undergone coronary artery bypass graft surgery while the patient is still in the Intensive Care Unit and one to two days following transfer from the Intensive Care Unit. This study has been approved by the University of British Columbia Behavioural Sciences Screening Committee. May I have your permission to conduct my study at your hospital?

The reason I have selected your hospital is that the hospital has a well established intensive care unit for the care of patients having coronary artery bypass graft surgery. Therefore, obtaining my sample would be facilitated due to the presence of this specialized unit in the hospital.

In consultation with my thesis committee, I have planned methods for contacting patients, spouses and physicians. If these approaches are not in keeping with hospital procedure, please advise me so an approach acceptable to the hospital can be developed. I can be reached at the above address or phone

I anticipate collecting and analyzing the data during the months of September to December 1984. I would be happy to share the results of my study with you.



Thank you for your time and consideration. I will be calling your office in a few days for an appointment to discuss the study with you in further detail.

Respectfully,

JoAnn Cozac

## APPENDIX C

### Physician Information Letter

Dear Dr.

My name is JoAnn Cozac. I am a registered nurse and at present I am a student in the Master of Science in Nursing Program at the University of British Columbia. I am doing a study to describe the spouse's experience of having a mate in the Intensive Care Unit following coronary artery bypass graft surgery.

My interest in this area developed through exposure to the spouses of my patients during my clinical experience. I have worked in intensive care units for six years, and specifically with patients having coronary artery bypass graft surgery for three years.

From my clinical experience, I have found that nurses need to know more about the spouse's experience during their mate's stay in the Intensive Care Unit following coronary artery bypass graft surgery. I believe that if nurses are more aware of the spouse's experience, we can more effectively prepare others to cope during this period of hospitalization.

To conduct this study, I plan to use the case study method in order to gain an in-depth understanding of the spouse's experience. I plan to interview the spouses of patients who have undergone coronary artery bypass graft surgery, while the patient is still in the Intensive Care Unit and one to two days following transfer from the Intensive Care Unit. This study has been approved by the University of British Columbia Behavioural Sciences Screening Committee and the hospital Nursing Research Committee.

I will be approaching patients who meet the following criteria:

1. The patient must be admitted to undergo coronary artery bypass graft surgery during the time period for patient selection into the study.
2. The patient must be transferred to the Intensive Care Unit following coronary artery bypass graft surgery.
3. The patient must be able to understand, speak, and read English regardless of ethnic background.
4. The patient must live in the Vancouver area.

5. The patient must be married and reside with his/her spouse.

After the head nurse of the cardiac teaching unit notifies me of patients under your care who meet my criteria, I will contact you to discuss any questions or comments you may have about the study. Patients will then be approached in order that I may explain the purpose, nature, and implications of the study to them, before seeking their written consent to approach their spouses concerning participation in my study.

I anticipate collecting and analyzing the data during the months of September to December 1984. I would be happy to share the results of my study with you.

If you have any questions, please contact me at the University of British Columbia, School of Nursing.

Respectfully,

JoAnn Cozac

**APPENDIX D****The Spouses' Experiences of Having a Mate in the Intensive Care****Unit Following Coronary Artery Bypass Graft Surgery****Patient Information and Consent Form**

My name is JoAnn Cozac. I am a registered nurse and at present I am a student in the Master of Science in Nursing Program at the University of British Columbia. I am doing a study to describe the feelings, thoughts and reactions spouses have when their mate is in the Intensive Care Unit following surgery like yours. Therefore, I would like to talk to your spouse about what it is like for him/her when you are in the Intensive Care Unit.

From my experience as a nurse working in the Intensive Care Unit and my readings, I have found that nurses need to know more about what spouses feel when their mates are hospitalized in an intensive care unit. I believe that if nurses are more aware of what spouses are experiencing, we can more effectively prepare others to cope during this period of hospitalization.

I would like your permission to ask your spouse to participate in this study. If you agree, I will approach your spouse in person to explain the purpose, nature, and implications of the study. I will then obtain your spouse's consent if he/she is agreeable to participating in this study.

If your spouse is agreeable to participating in this study, I will interview him/her twice while you are in hospital. The interviews will be tape-recorded, but your name or your spouse's name will not be used anywhere on the tapes. The tapes will be made available only to myself and my three professors at UBC. The tapes will be erased after my report has been written. No names will be disclosed in my report. All information received will be confidential and grouped so that individual contributions will not be identifiable.

THERE ARE NO FINANCIAL BENEFITS TO PARTICIPATING IN THIS STUDY. YOUR DECISION TO GRANT PERMISSION OR NOT TO GRANT PERMISSION FOR ME TO APPROACH YOUR SPOUSE WILL NOT AFFECT YOUR CURRENT OR FUTURE MEDICAL OR NURSING CARE. YOU ARE FREE TO WITHDRAW YOUR CONSENT AT ANY TIME. YOUR SPOUSE IS ALSO FREE TO WITHDRAW FROM THE STUDY AT ANY TIME. PLEASE FEEL FREE TO ASK ANY QUESTIONS YOU MAY HAVE ABOUT THIS STUDY.

If you have any questions, please contact me at the University  
of British Columbia, School of Nursing

\* \* \* \* \*

I, the undersigned, give permission to JoAnn Cozac, RN, BSN  
(MSN student) to approach my spouse in person to explain the  
purpose, nature, and implications of her study. I acknowledge  
receiving a copy of this consent.

Patient's signature: \_\_\_\_\_

Witnessed: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX E

### The Spouses' Experiences of Having a Mate in the Intensive Care

#### Unit Following Coronary Artery Bypass Graft Surgery

#### Spouse Information and Consent Form

My name is JoAnn Cozac. I am a registered nurse and at present I am a student in the Master of Science in Nursing Program at the University of British Columbia. I am interested in learning about the feelings, thoughts and reactions of spouses while their mate is in the Intensive Care Unit, following coronary artery bypass graft surgery. Specifically, I am interested in talking with you about what the experience is like for you during your mate's stay in the Intensive Care Unit.

Most people find it helpful to talk over their feelings with a health professional. In addition, I believe that if nurses are aware of the feelings, thoughts and reactions that spouses have, we can more effectively prepare others to cope with this period of hospitalization. Please feel free to ask any questions you may have about this study.

This letter is to inquire if you are willing to participate in my study. I would like to interview you once or more often, and tape record the conversation. We will decide together how many interviews will take place. Each interview will be approximately one to two hours, and will be arranged at a time most convenient for you. The tapes of the interview will be available only to myself and my three professors at UBC. The tapes will be destroyed after the written thesis is completed. You may request that the tape recorder be turned off for any part of the interview. You may also request any tape or portion of a tape to be erased at any time during the study.

THERE ARE NO FINANCIAL BENEFITS TO PARTICIPATING IN THIS STUDY. YOUR DECISION TO PARTICIPATE OR NOT TO PARTICIPATE IN THIS STUDY WILL NOT AFFECT THE CURRENT OR FUTURE MEDICAL OR NURSING CARE OF YOUR MATE. YOU ARE FREE TO WITHDRAW FROM THE STUDY AT ANY TIME, AND THIS ACTION WILL NOT AFFECT THE TREATMENT OF YOUR MATE. YOUR MATE IS ALSO FREE TO WITHDRAW HIS/HER CONSENT AT ANY TIME. YOU ALSO HAVE THE RIGHT TO REFUSE TO ANSWER ANY QUESTIONS. PLEASE FEEL FREE TO ASK ANY QUESTIONS YOU MAY HAVE ABOUT THIS STUDY.

All information received is confidential. Your name will not be included in the study materials. However, the overall results of the study may be published to promote an understanding of the concerns of spouses whose mates are in the Intensive Care Unit following coronary artery bypass graft surgery.

If you have any questions, please contact me at the University of British Columbia, School of Nursing

\* \* \* \* \*

I, understand the nature of this study and give my consent to participate. I acknowledge receiving a copy of this consent.

Signed: \_\_\_\_\_

Witnessed: \_\_\_\_\_

Date: \_\_\_\_\_

**APPENDIX F**  
**Interview Guide\***

The interview will begin with an examination of the purpose of the interview and the amount of time available for the interview.

Demographic Data:

Initials of Spouse: \_\_\_\_\_  
Spouse's Age: \_\_\_\_\_ Patient's Age: \_\_\_\_\_  
Spouse's Sex: \_\_\_\_\_ Educational Level: \_\_\_\_\_  
Occupation: \_\_\_\_\_ Years of Married Life: \_\_\_\_\_  
Birthplace: \_\_\_\_\_ Years in Canada: \_\_\_\_\_  
Prior Experience in the ICU Setting: \_\_\_\_\_

First Interview Sample Questions:

Sample Questions:

1. How often have you visited your mate? What was that like for you? What did you expect it to be like?
2. How do you feel before you visit your mate? How do you feel when you leave?
3. What treatment did you expect your mate to receive in the Intensive Care Unit? What treatment did you see him/her receive?
4. What is your understanding of the purpose of your mate's stay in the Intensive Care Unit?



5. Did you have contact with other patients and/or their families?
6. What has been the most difficult for you during your mate's hospitalization in the Intensive Care Unit?
7. Were there any areas of your everyday life that were changed by this experience? In what way?
8. Who do you see as a support for you during this time?
9. How involved would you like to be in your mate's care?
10. What things do nurses do that you find particularly helpful for yourself during your mate's stay in the Intensive Care Unit?

\* The sample questions have been adapted from: Breu and Dracup (1978); Gauchie (1972); Hampe (1973); Potter (1979); Rasie (1980); and Roberts (1976).